PIONEER®
The Art of Entertainment

Service Manual

• KEH-P5700R/X1M/EW

ORDER NO.
CRT2171

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P5700R X1M/EW
KEH-P5730R X1M/EW

NOTE:

- **See the separate manual CX-631(CRT1640) for the cassette mechanism description.**
- **The cassette mechanism assy employed in this model is one of 2L series.**
- **Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.**
- **This service manual does not describe the CD test mode.**
  For the operations in the CD test mode, refer to the CD player's Service Manual.

CONTENTS

1. SAFETY INFORMATION 2
2. EXPLODED VIEWS AND PARTS LIST 2
3. SCHEMATIC DIAGRAM 10
4. PCB CONNECTION DIAGRAM 20
5. ELECTRICAL PARTS LIST 30
6. ADJUSTMENT 36
7. GENERAL INFORMATION 38
   7.1 PARTS 38
      7.1.1 IC 38
      7.1.2 DISPLAY 43
   7.2 DISASSEMBLY 44
   7.3 BLOCK DIAGRAM 45
8. OPERATIONS AND SPECIFICATIONS 46

www.manualscenter.com

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 501 Orchard Road, #10-00, Wheelock Place, Singapore 238880

© **PIONEER ELECTRONIC CORPORATION 1998**

K-ZEM. FEB. 1998 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING

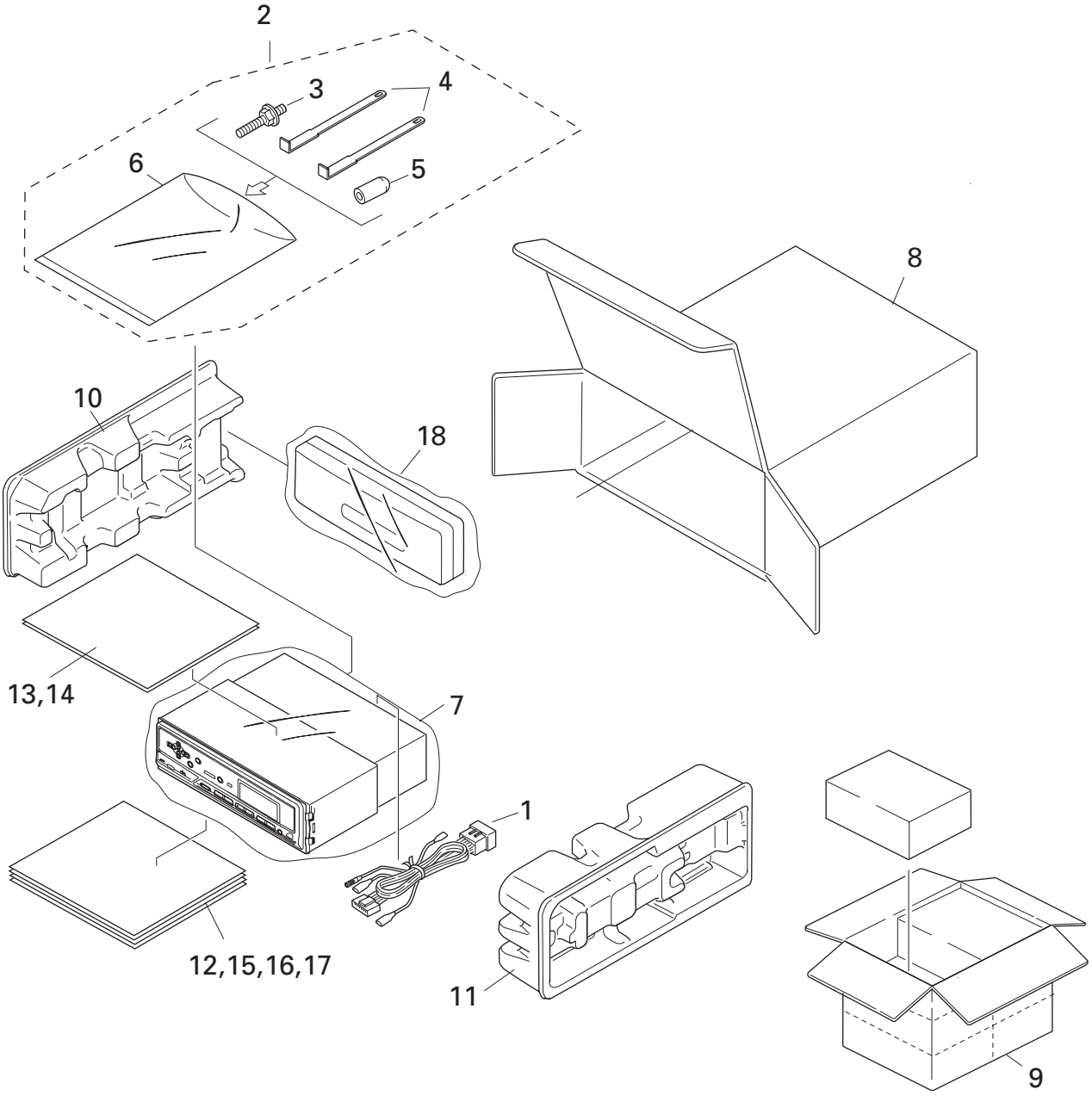


Fig. 1

NOTE:

- **Parts marked by "*" and ⊗ can not be supplied.**
- Screws adjacent to ∇ mark on the product are used for disassembly.

● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDE5497
	2	Accessory Assy	CEA1917
	3	Screw	CBA1304
	4	Handle(x2)	CNC5395
	5	Bush	CNV3930
*	6	Polyethylene Bag	E36-615
	7	Polyethylene Bag	CEG-162
	8	Carton (KEH-P5700R/X1M/EW)	CHG3464
		Carton (KEH-P5730R/X1M/EW)	CHG3465
	9	Contain Box (KEH-P5700R/X1M/EW)	CHL3464
		Contain Box (KEH-P5730R/X1M/EW)	CHL3465
	10	Protector	CHP2021
	11	Protector	CHP2022
	12	Owner's Manual	CRD2589
	13	Owner's Manual	CRD2590
	14	Owner's Manual	CRD2591
	15	Installation Manual	CRD2592
*	16	Passport	CRY1013
*	17	Warranty Card	CRY1087
	18	Case Assy	CXB1063

● Owner's Manual, Installation Manual

Model	Part No.	Language
KEH-P5700R/X1M/EW KEH-P5730R/X1M/EW	CRD2589	English, Spanish
	CRD2590	German, French
	CRD2591	Italian, Dutch
	CRD2592	English, Spanish, German, French Italian, Dutch

www.manualscenter.com

2.2 EXTERIOR

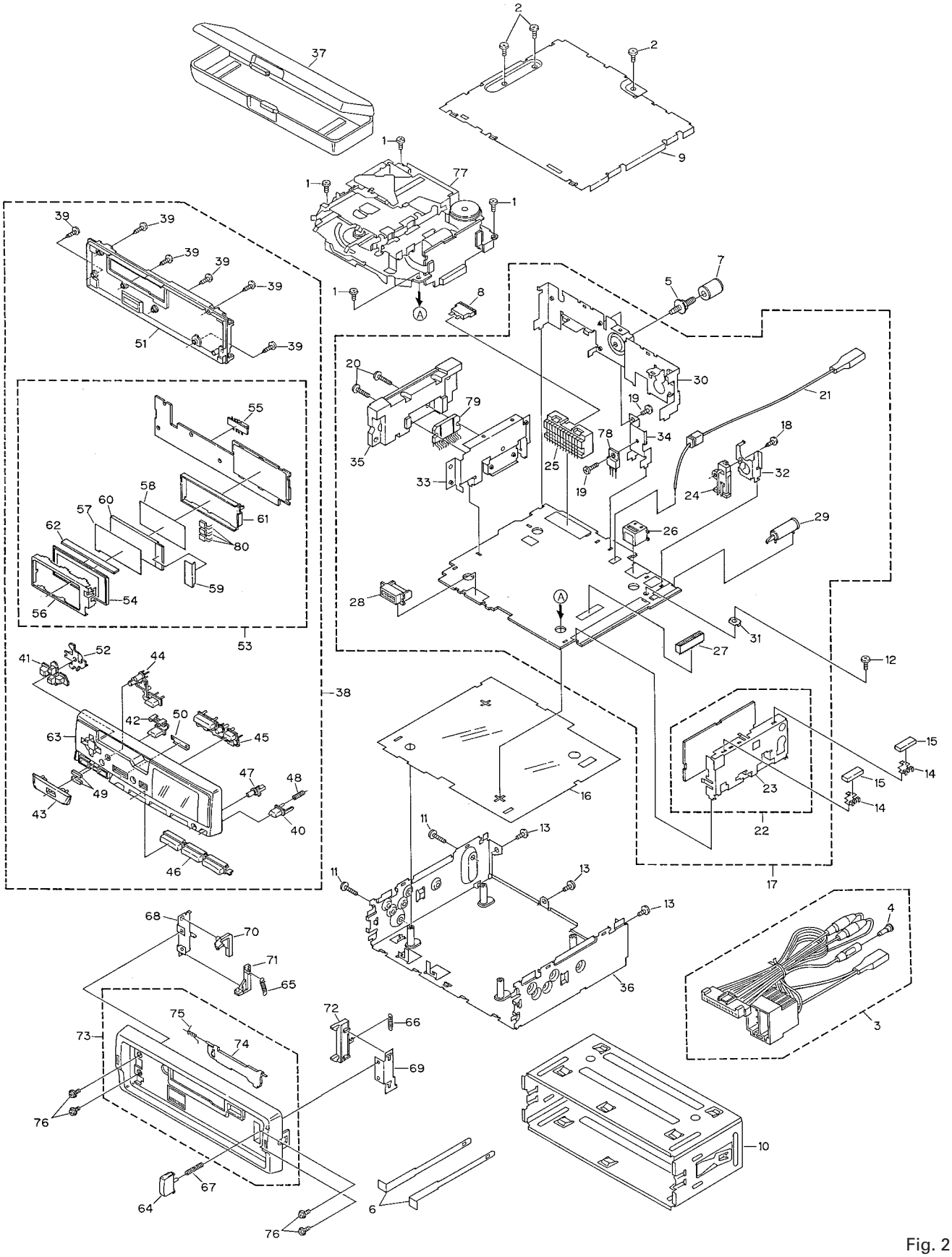


Fig. 2

(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ26P050FMC
	2	Screw	BSZ30P060FMC
	3	Cord Assy	CDE5497
	4	Cap	CKX-003
	5	Screw	CBA1304
	6	Handle	CNC5395
	7	Bush	CNV3930
	8	Fuse	CEK1136
	9	Case	CNB2283
	10	Holder Unit	CXB2687
	11	Screw	BMZ30P100FMC
	12	Screw	BSZ30P055FUC
	13	Screw	BSZ30P060FMC
	14	Holder	CNC5704
	15	Cushion	CNM4870
	16	Insulator	CNM5571
⊗	17	Tuner Amp Unit	CWM5669
	18	Screw	BPZ26P080FMC
	19	Screw	BSZ26P080FMC
	20	Screw	BSZ26P140FMC
	21	Cord(CN603)	CDE5327
	22	FM/AM Tuner Unit	CWE1466
	23	Holder	CNC6554
	24	Pin Jack(CN301)	CKB1028
	25	Plug(CN951)	CKM1270
	26	Connector(CN751)	CKS3408
	27	Connector(CN602)	CKS3568
	28	Connector(CN601)	CKS3581
	29	Antenna Jack(CN402)	CKX1056
	30	Panel	CNB2256
	31	Holder	CNC5399
	32	Holder	CNC6531
	33	Holder	CNC6674
	34	Holder	CNC6845
	35	Heat Sink	CNR1426
	36	Chassis Unit	See Contrast table(2)
	37	Case Assy	CXB1063
	38	Detach Grille Assy	See Contrast table(2)
	39	Screw	BPZ20P100FZK
	40	Button(⏏)	See Contrast table(2)
	41	Button(▲,▼ , ◄,►)	See Contrast table(2)
	42	Button(SOURCE)	CAC5433
	43	Button(+,–)	See Contrast table(2)
	44	Button(BAND,F,A)	CAC5437
	45	Button(TA/PTY,P, ⏏)	CAC5438
	46	Button(1,2,3,4,5,6)	See Contrast table(2)
	47	Button(D)	CAC5441
	48	Spring	CBH2103
	49	Spacer	CNM5572
	50	Sheet	CNM5897
	51	Cover	See Contrast table(2)
	52	Lighting Conductor	CNV5195
	53	Keyboard Unit	See Contrast table(2)
	54	LCD(LCD901)	See Contrast table(2)
	55	Connector(CN901)	CKS3580
	56	Holder	CNC7479
	57	Sheet	CNM5726
	58	Sheet	CNM5727
	59	Sheet	CNM5728
	60	Lighting Conductor	CNV5196
	61	Housing	CNV5197
	62	Connector	CNV5205
	63	Grille Unit	See Contrast table(2)
	64	Button	CAC4836
	65	Spring	CBH1834
	66	Spring	CBH1835
	67	Spring	CBH1996
	68	Bracket	CNC6135
	69	Bracket	CNC6791
	70	Arm	CNV4692
	71	Arm	CNV4693
	72	Arm	CNV4728
	73	Panel Unit	See Contrast table(2)
	74	Door	CAT1930
	75	Spring	CBH1838
	76	Screw	IMS20P030FZK
	77	Cassette Mechanism Module	EXK3615
	78	Transistor(Q951)	2SD2396
	79	IC(IC301)	TDA7384
	80	LED(D903 — 905)	NSPWF50SB

www.manualscenter.com

(2) CONTRAST TABLE

KEH-P5700R/X1M/EW and KEH-P5730R/X1M/EW are constructed the same except for the following:

Mark No.	Symbol and Description	Part No. KEH-P5700R/X1M/EW	Part No. KEH-P5730R/X1M/EW
36	Chassis Unit	CXB2025	CXB2346
38	Detach Grille Assy	CXB2440	CXB2305
40	Button(⏏)	CAC5430	CAC5514
41	Button(▲,▼,◄,►)	CAC5431	CAC5515
43	Button(+,–)	CAC5435	CAC5516
46	Button(1,2,3,4,5,6)	CAC5439	CAC5517
51	Cover	CNS4775	CNS4858
53	Keyboard Unit	CWM5802	CWM5670
54	LCD(LCD901)	CAW1457	CAW1478
63	Grille Unit	CXB2460	CXB2461
73	Panel Unit	CXB2349	CXB2350

2.3 CASSETTE MECHANISM MODULE

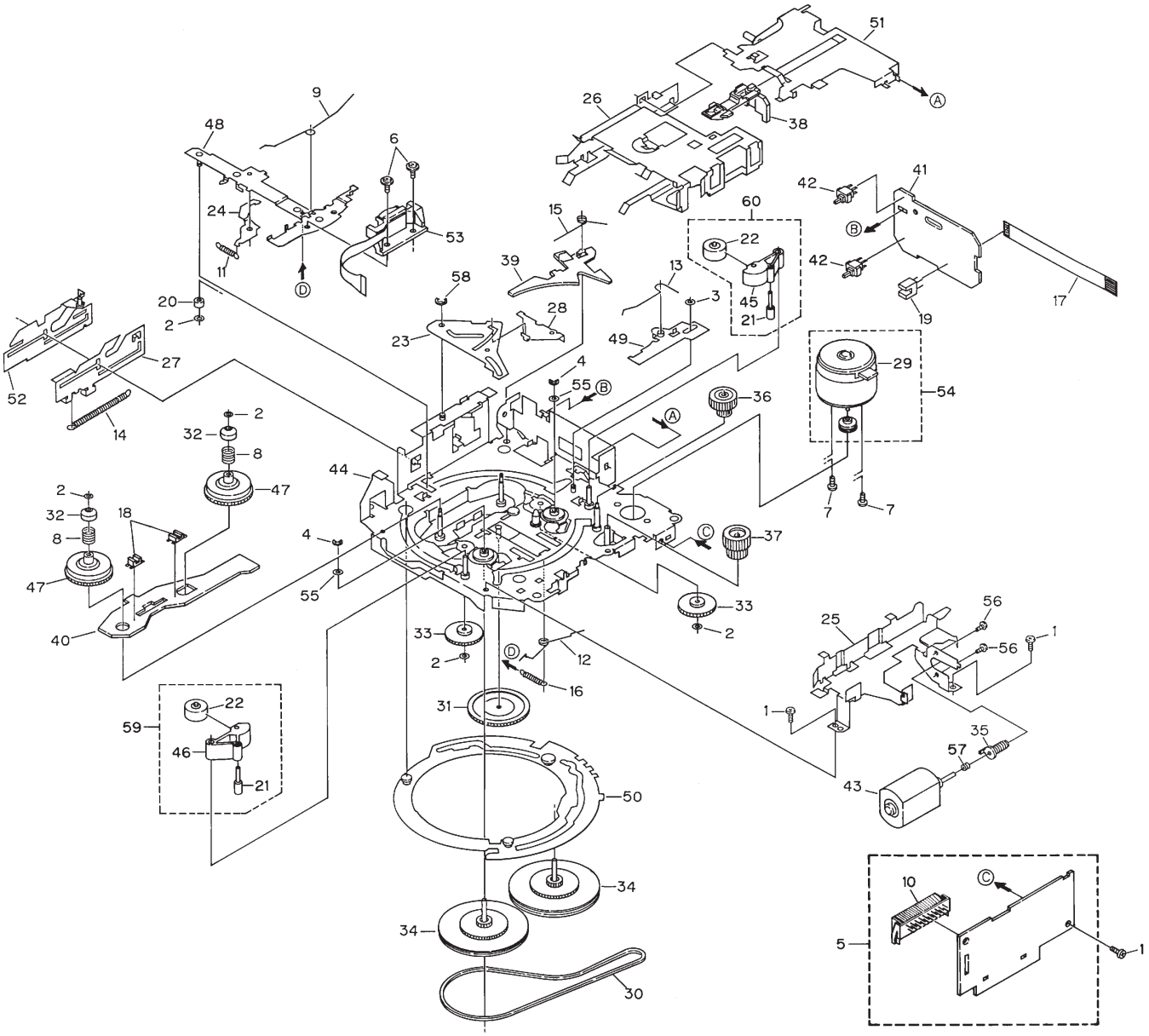


Fig. 3

www.manualscenter.com

● CASSETTE MECHANISM MODULE SECTION PARTS LIST

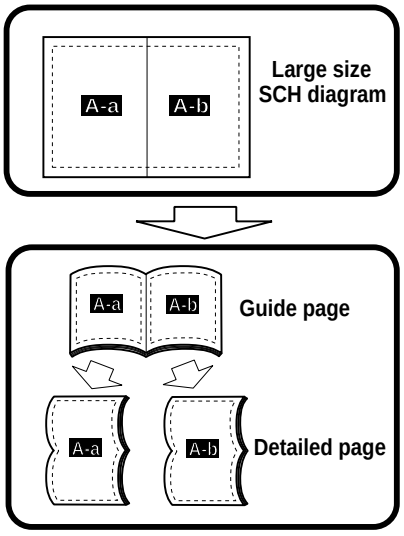
Mark	No.	Description	Part No.
	1	Screw	BSZ20P040FMC
	2	Washer	CBF1037
	3	Washer	CBF1038
	4	Washer	CBG1003
	5	Deck Unit	EWM1010
	6	Screw	EBA1028
	7	Screw	EBA1037
	8	Spring	EBH1531
	9	Spring	EBH1575
	10	Plug(CN251)	CKS3540
	11	Spring	EBH1515
	12	Spring	EBH1587
	13	Spring	EBH1517
	14	Spring	EBH1518
	15	Spring	EBH1519
	16	Spring	EBH1537
	17	Cord	EDD1020
	18	Photo-interrupter(EGN2,3)	EGN1006
	19	Photo-interrupter(EGN1)	EGN1005
	20	Roller	ENR1031
	21	Shaft	ELA1373
	22	Pinch Roller	ENV1518
	23	Arm	ENC1489
	24	Arm	ENC1397
	25	Guide	ENC1481
	26	Holder	ENC1417
	27	Lever	ENC1448
	28	Arm	ENC1488
*	29	Motor	EXM1031
	30	Belt	ENT1027
	31	Gear	ENV1347
	32	Collar	ENV1508
	33	Gear	ENV1350
	34	Flywheel	ENV1529
	35	Worm Gear	ENV1439
	36	Worm Wheel	ENV1440
	37	Gear	ENR1028
	38	Lever	ENV1442
	39	Arm	ENV1525
	40	Gathering P.C.Board	ENX1037
	41	Gathering P.C.Board	ENX1042
	42	Switch(S1,S2)	ESG1004
	43	Motor Unit(M2)	EXA1485
	44	Chassis Unit	EXA1511
	45	Pinch Holder	ENV1485
	46	Pinch Holder	ENV1486
	47	Reel Unit	EXA1543
	48	Head Base Unit	EXA1457
	49	Lever Unit	EXA1438
	50	Gear Unit	EXA1545
	51	Frame Unit	EXA1458
	52	Lever Unit	EXA1439
	53	Head Assy(HD1)	EXA1506
	54	Motor Unit(M1)	EXA1544
	55	Washer	HBF-179
	56	Screw	BMZ20P022FMC
	57	Spring	EBH1545
	58	Washer	YE20FUC
	59	Pinch Holder Unit	EXA1529
	60	Pinch Holder Unit	EXA1528

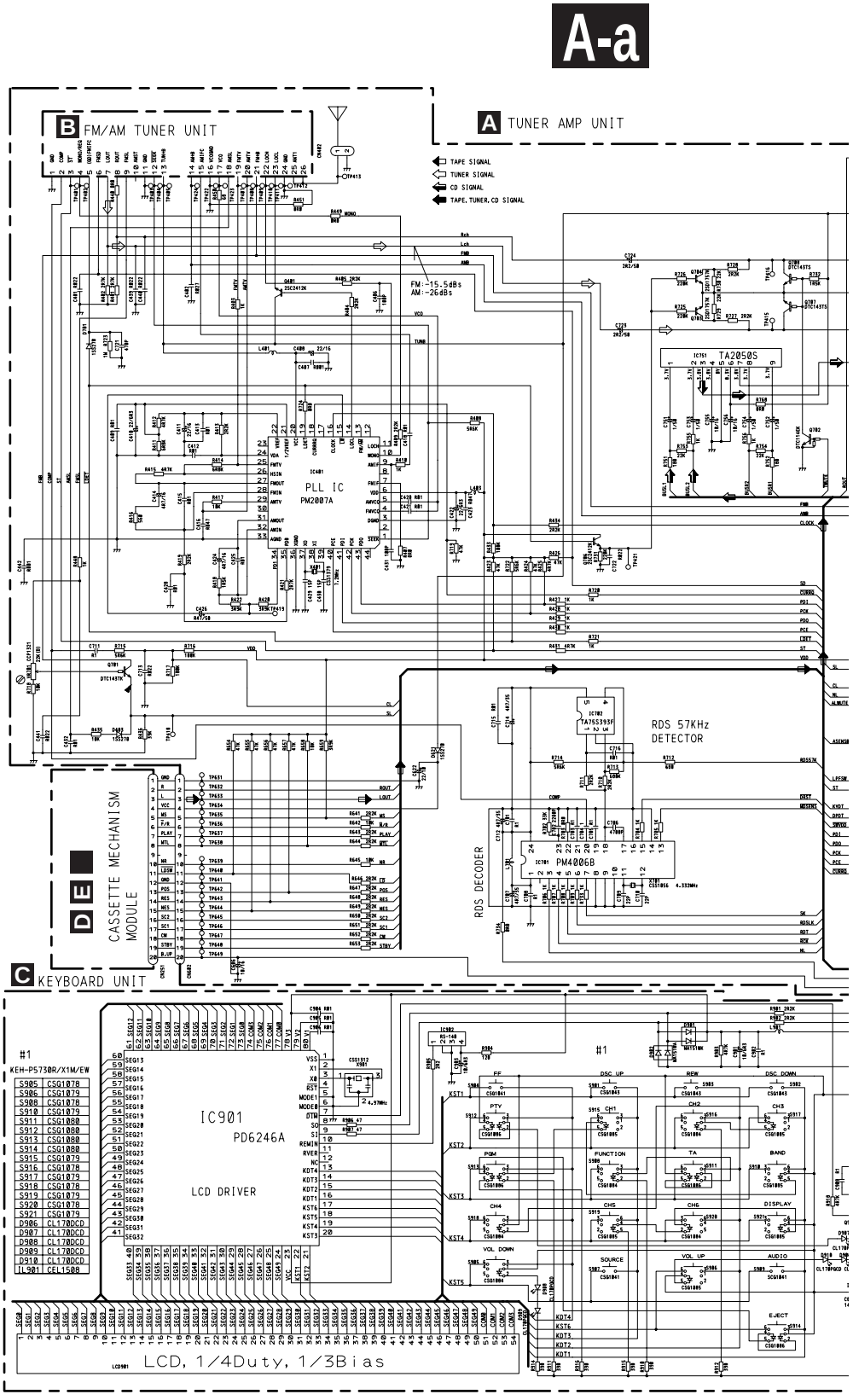
www.manualscenter.com

3. SCHEMATIC DIAGRAM

3.1 OVERALL CONNECTION DIAGRAM (GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".





www.manualscenter.com

A-b

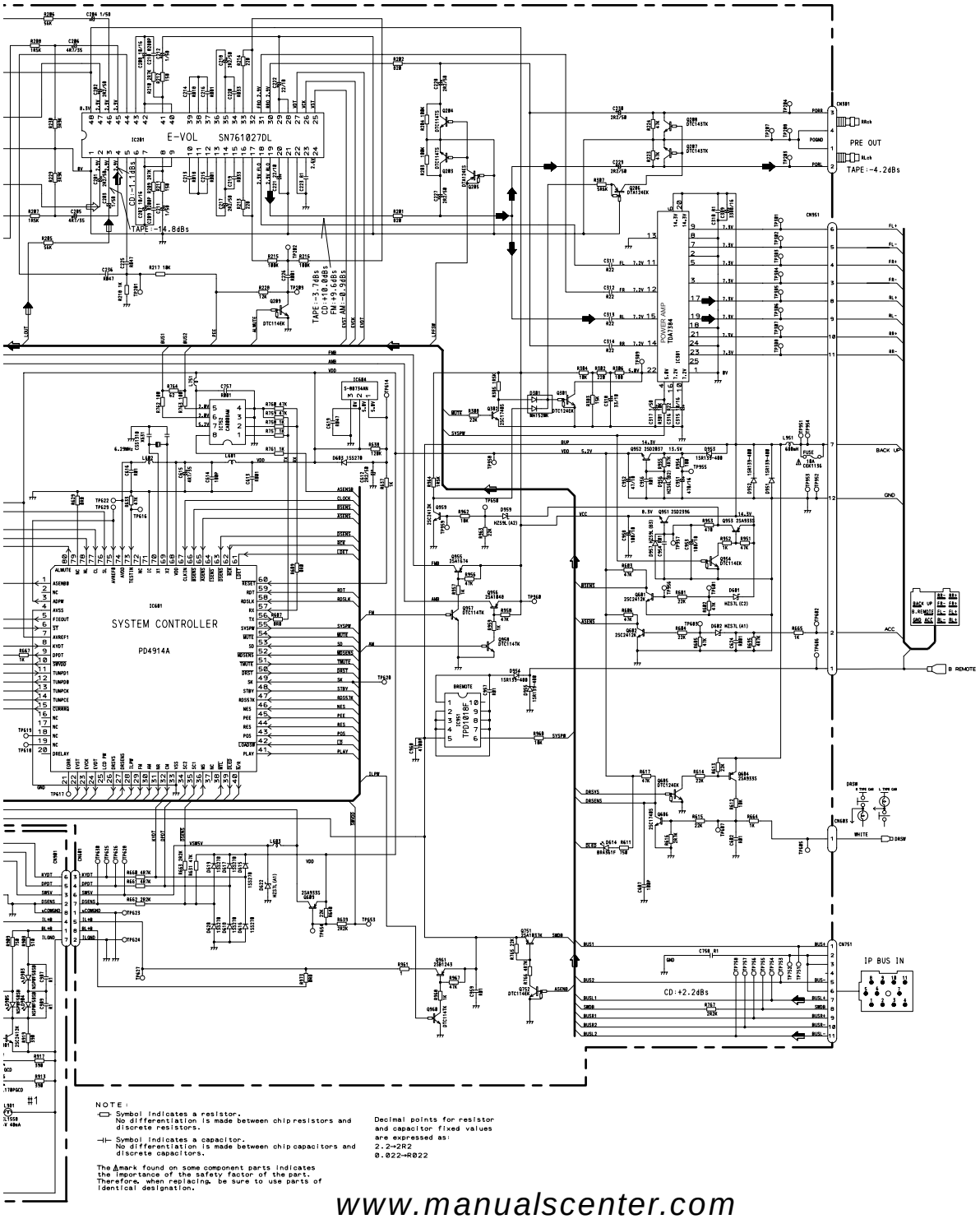
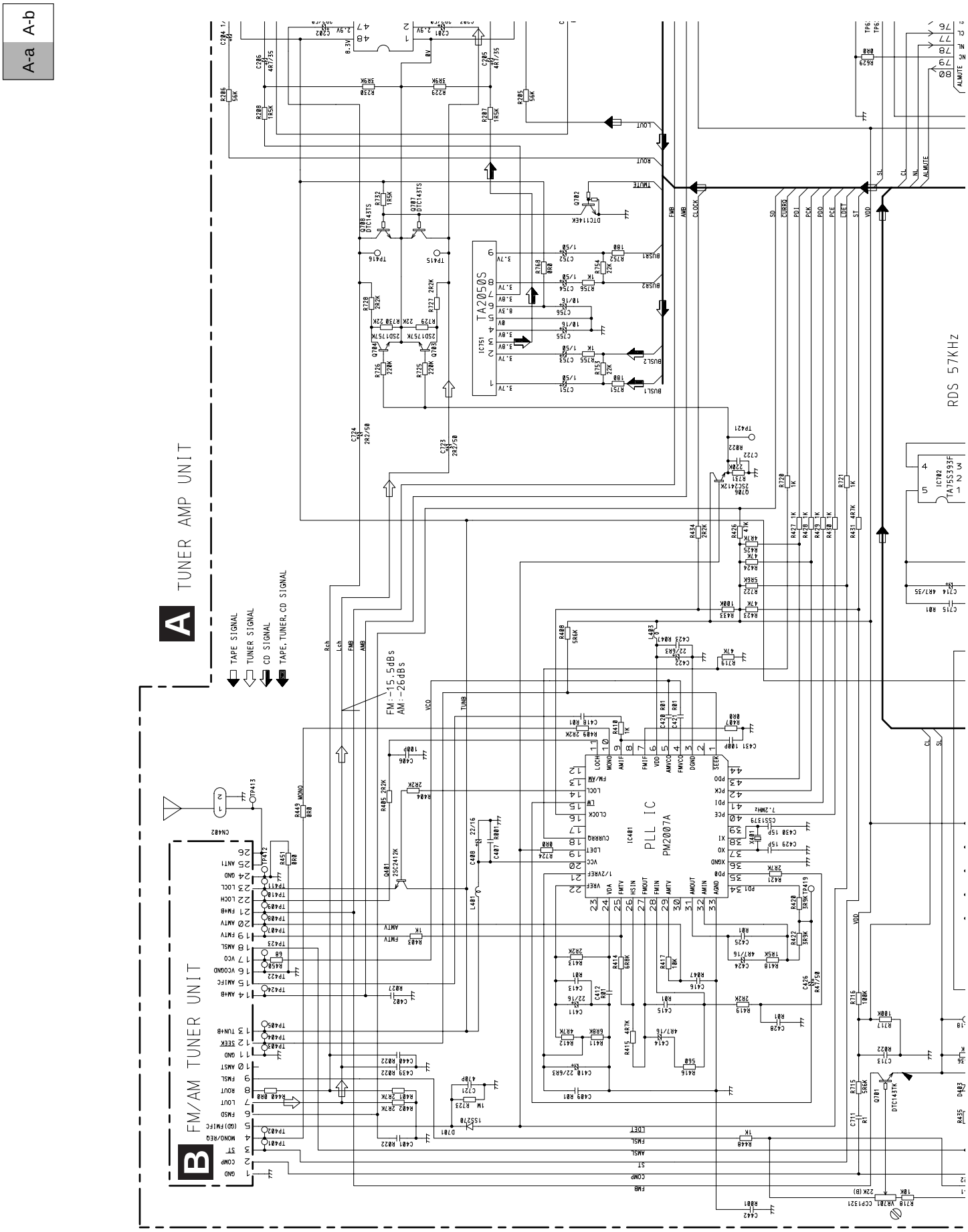


Fig. 4

www.manualscenter.com



www.manualscenter.com

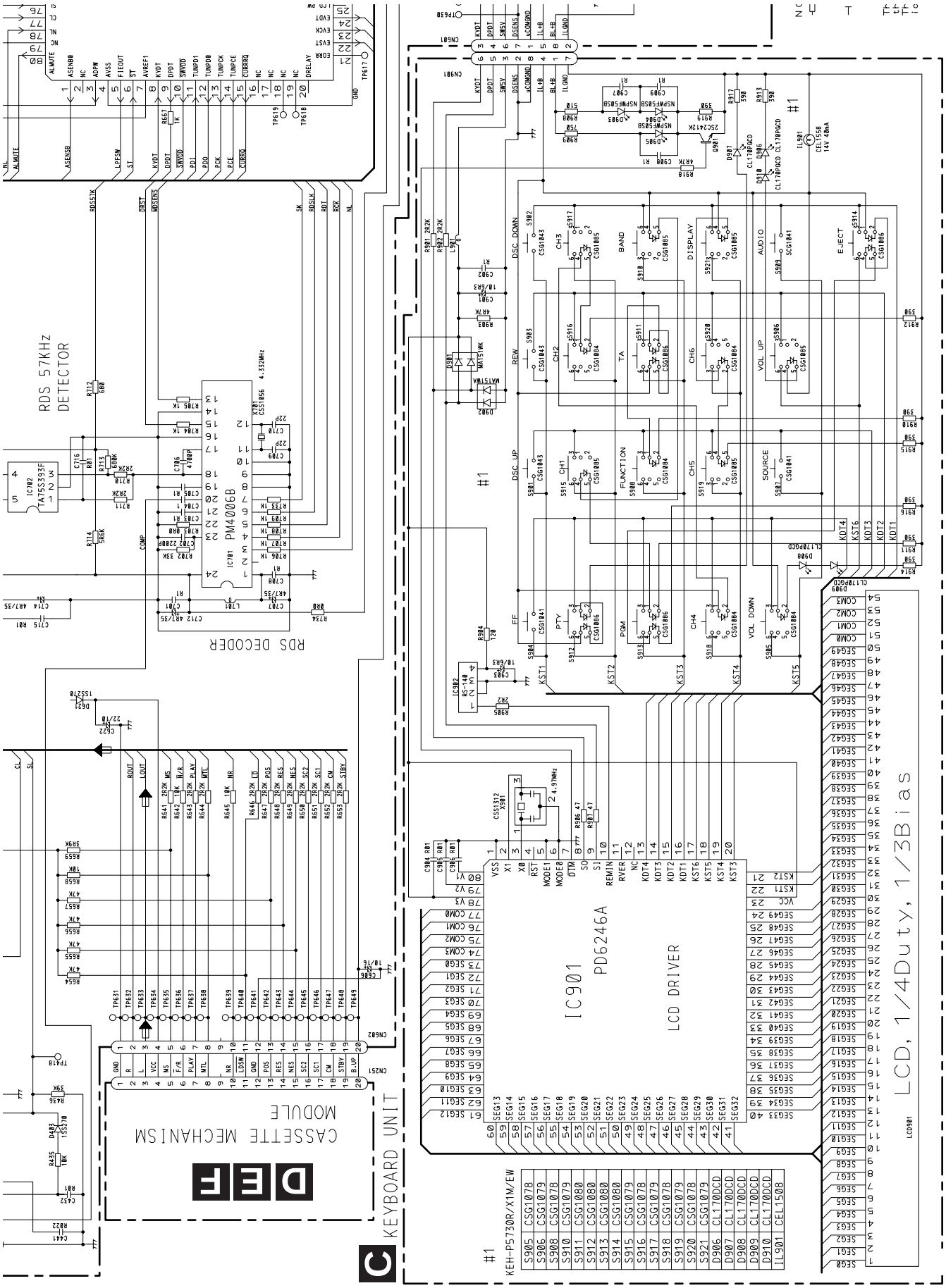
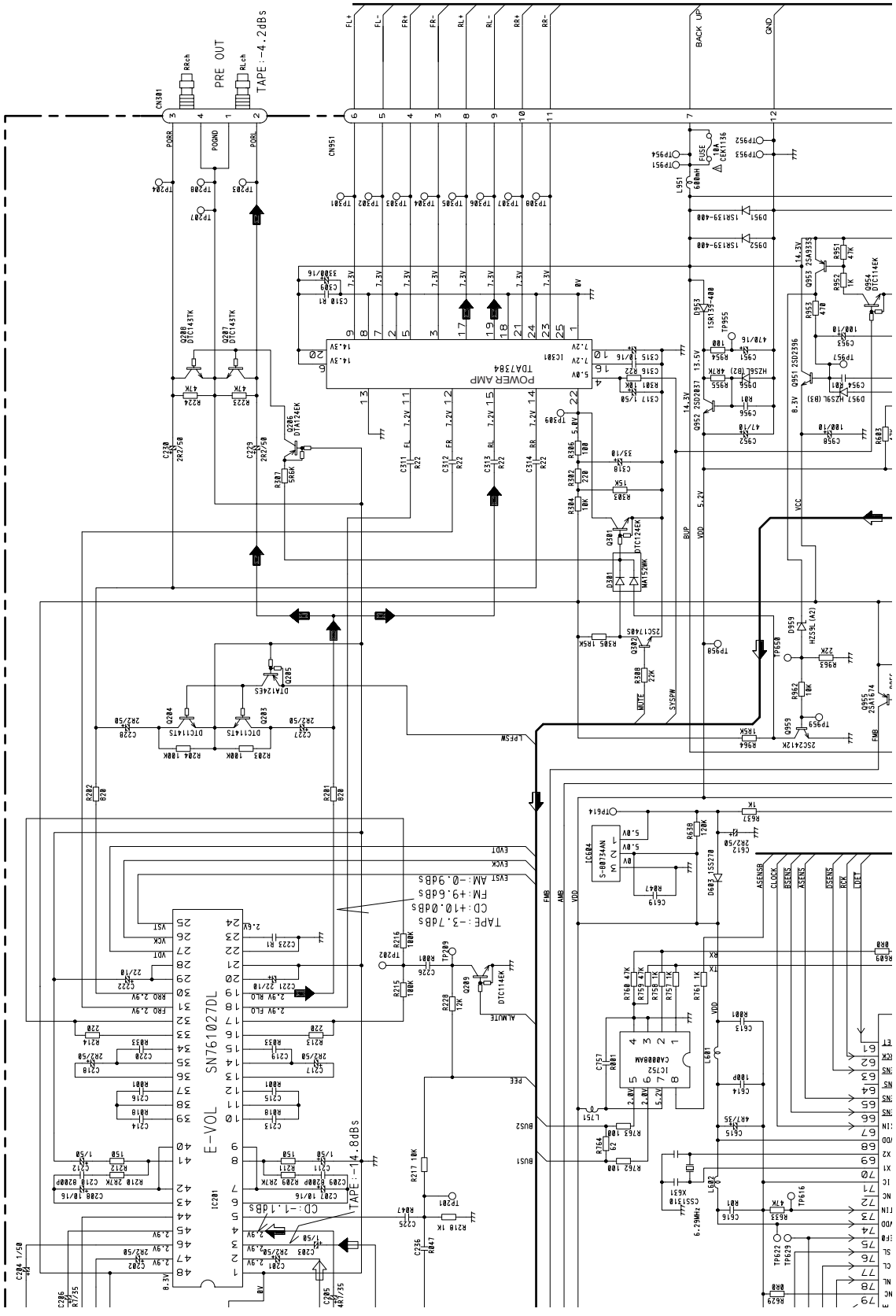

RDS 57KHz DETECTOR
RDS DECODER
IC901 PD6246A LCD DRIVER
LCD, 1/4Duty, 1/3Bias
KEYBOARD UNIT
CASSETTE MECHANISM MODULE
DEF
KEH-P5730R/X1M/EW
S905 CSG1078
S906 CSG1079
S907 CSG1078
S908 CSG1079
S910 CSG1078
S911 CSG1080
S912 CSG1080
S913 CSG1080
S914 CSG1080
S915 CSG1079
S916 CSG1078
S917 CSG1079
S918 CSG1078
S919 CSG1079
S920 CSG1078
S921 CSG1079
D906 CL170DCD
D907 CL170DCD
D908 CL170DCD
D909 CL170DCD
D910 CL170DCD
IL901 CEL1508

Fig. 5

A-b
A-a



www.manualscenter.com

A-a A-b

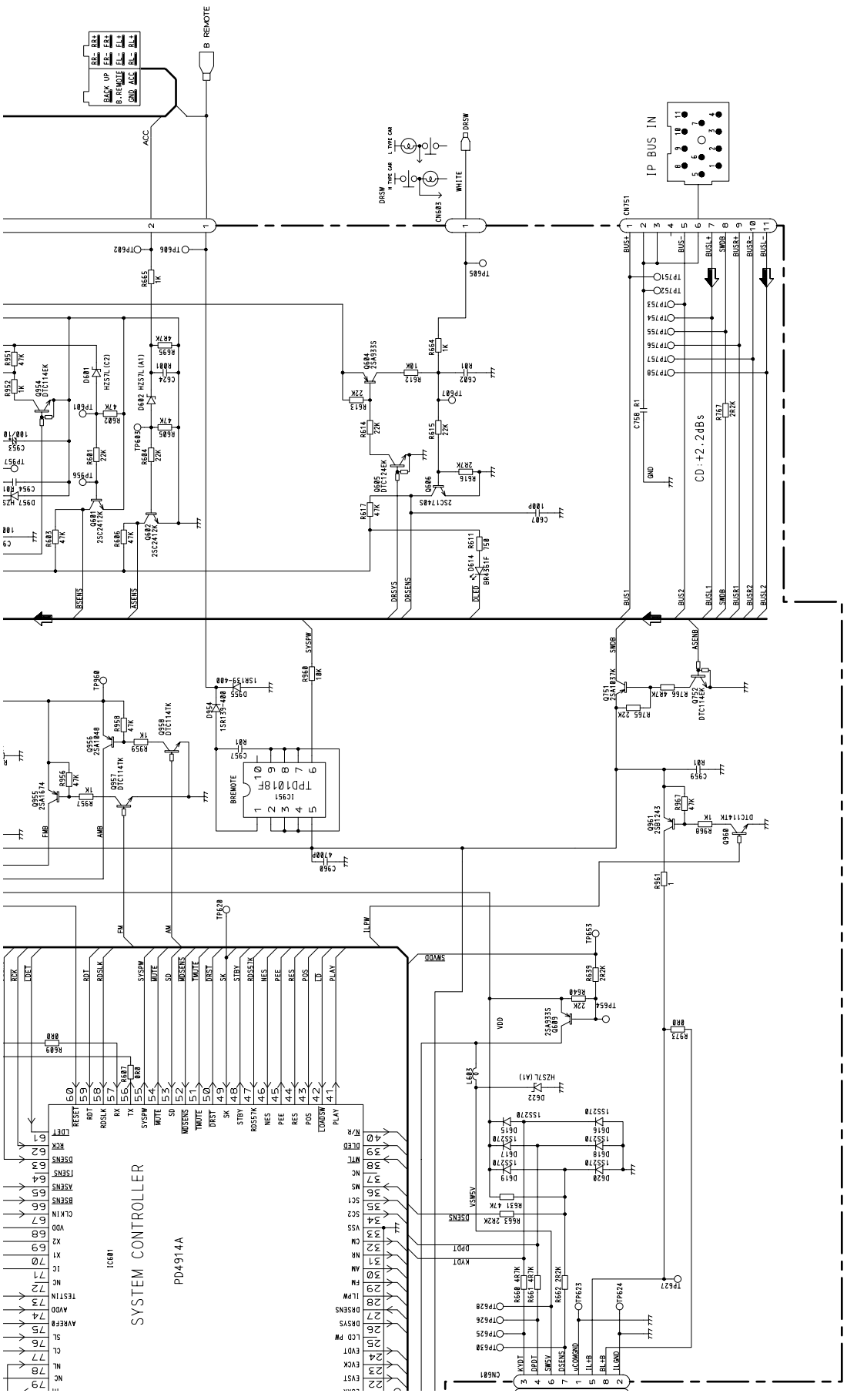
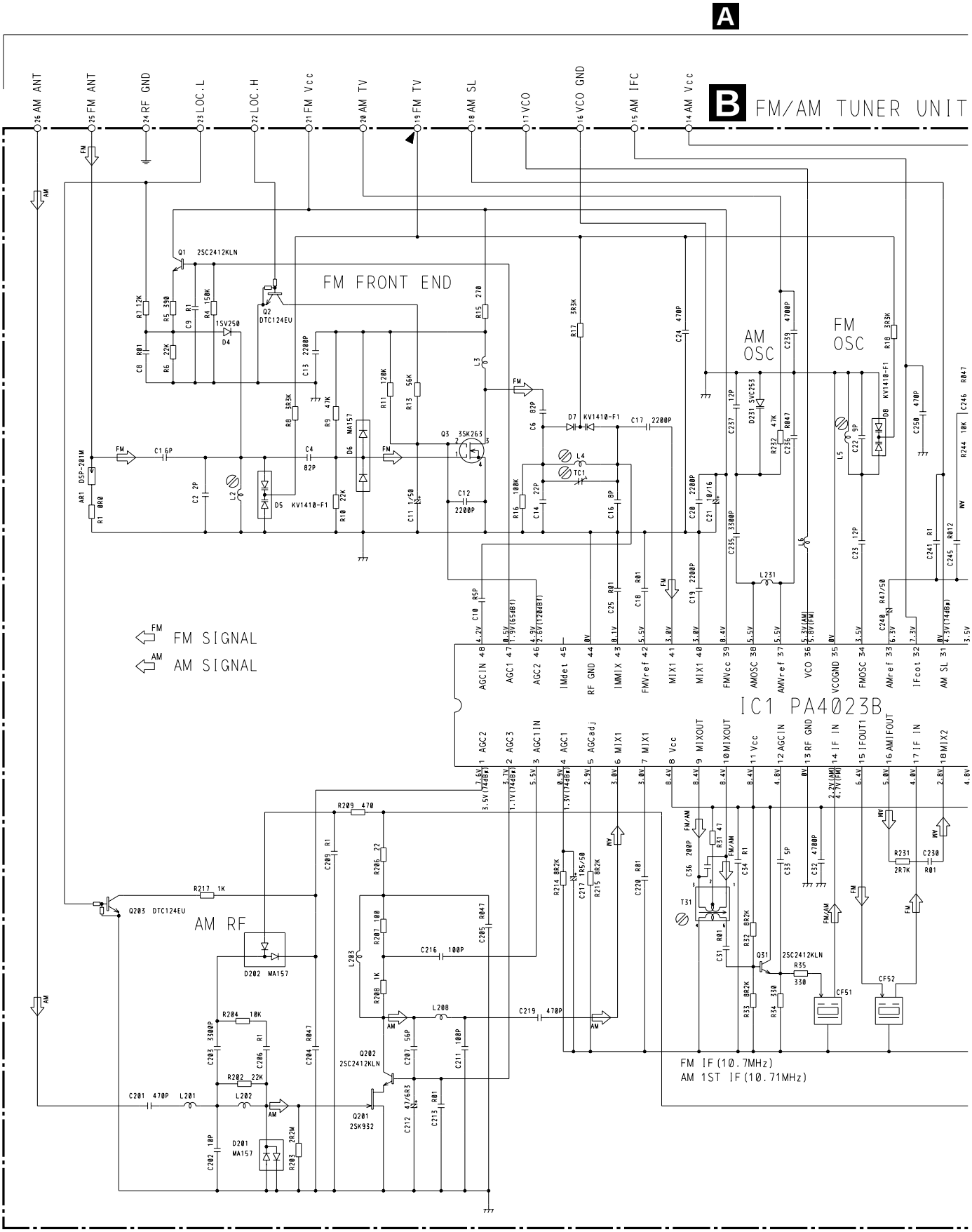


Fig. 6

www.manualscenter.com

3.2 FM/AM TUNER UNIT



www.manualscenter.com

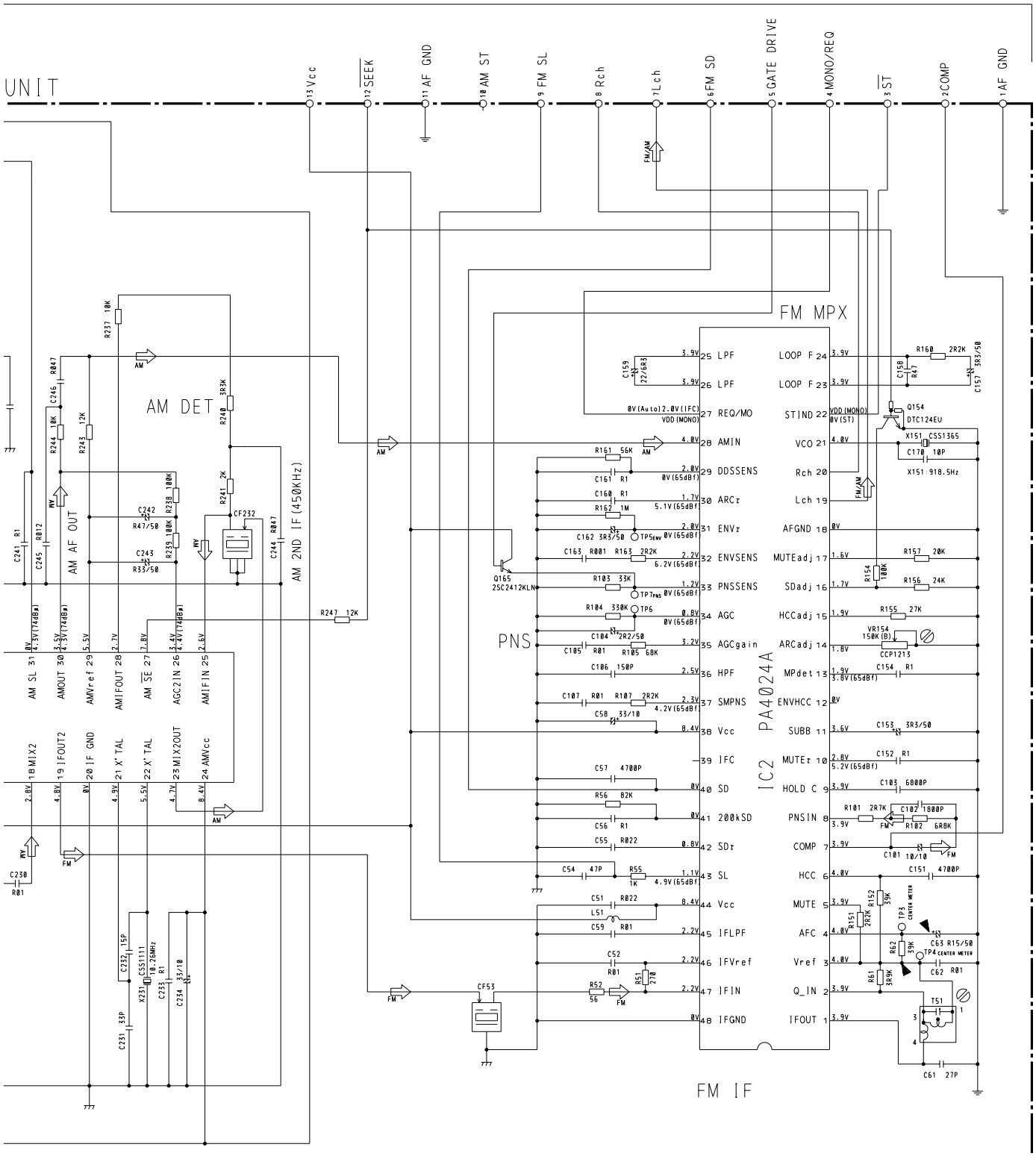
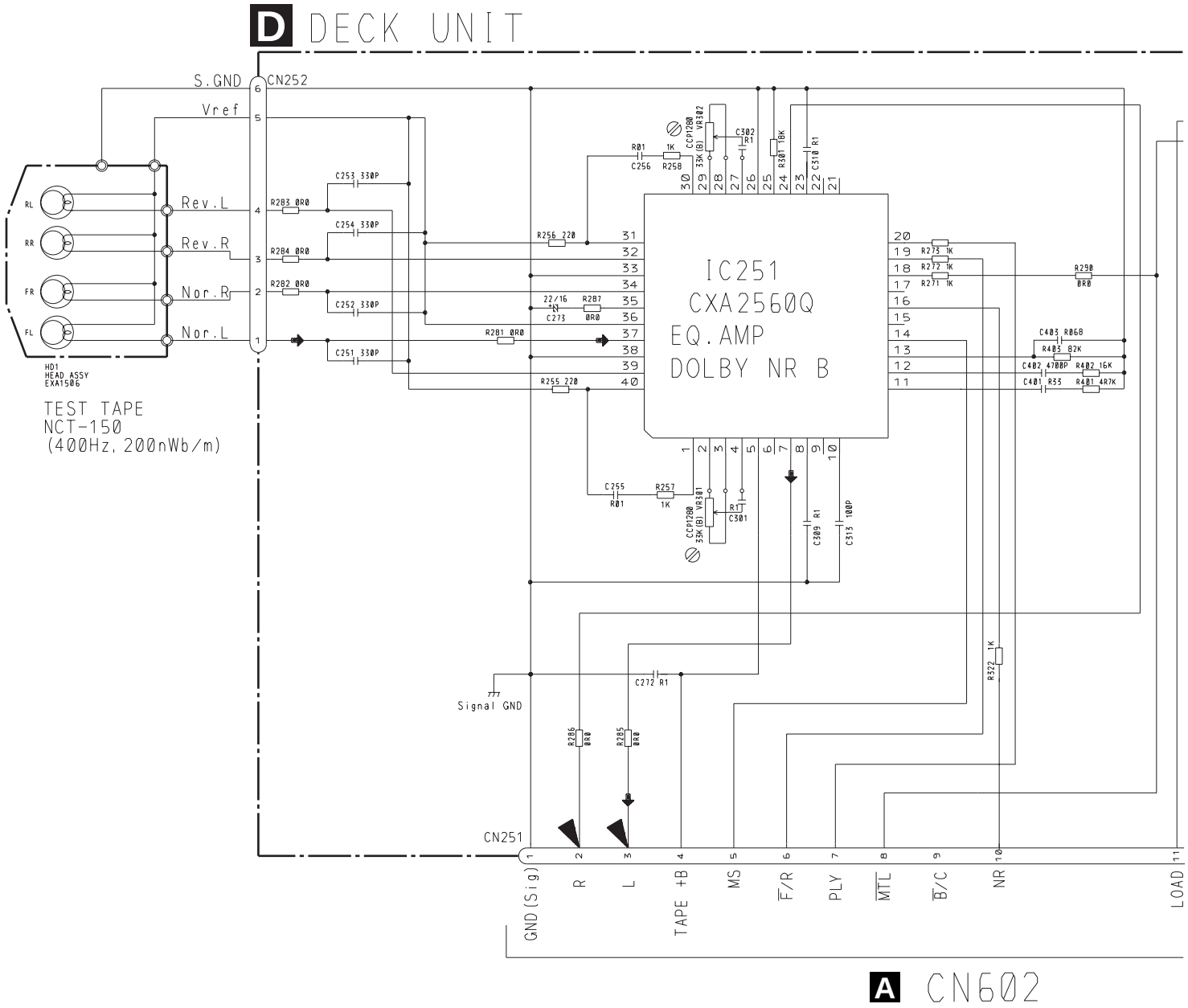


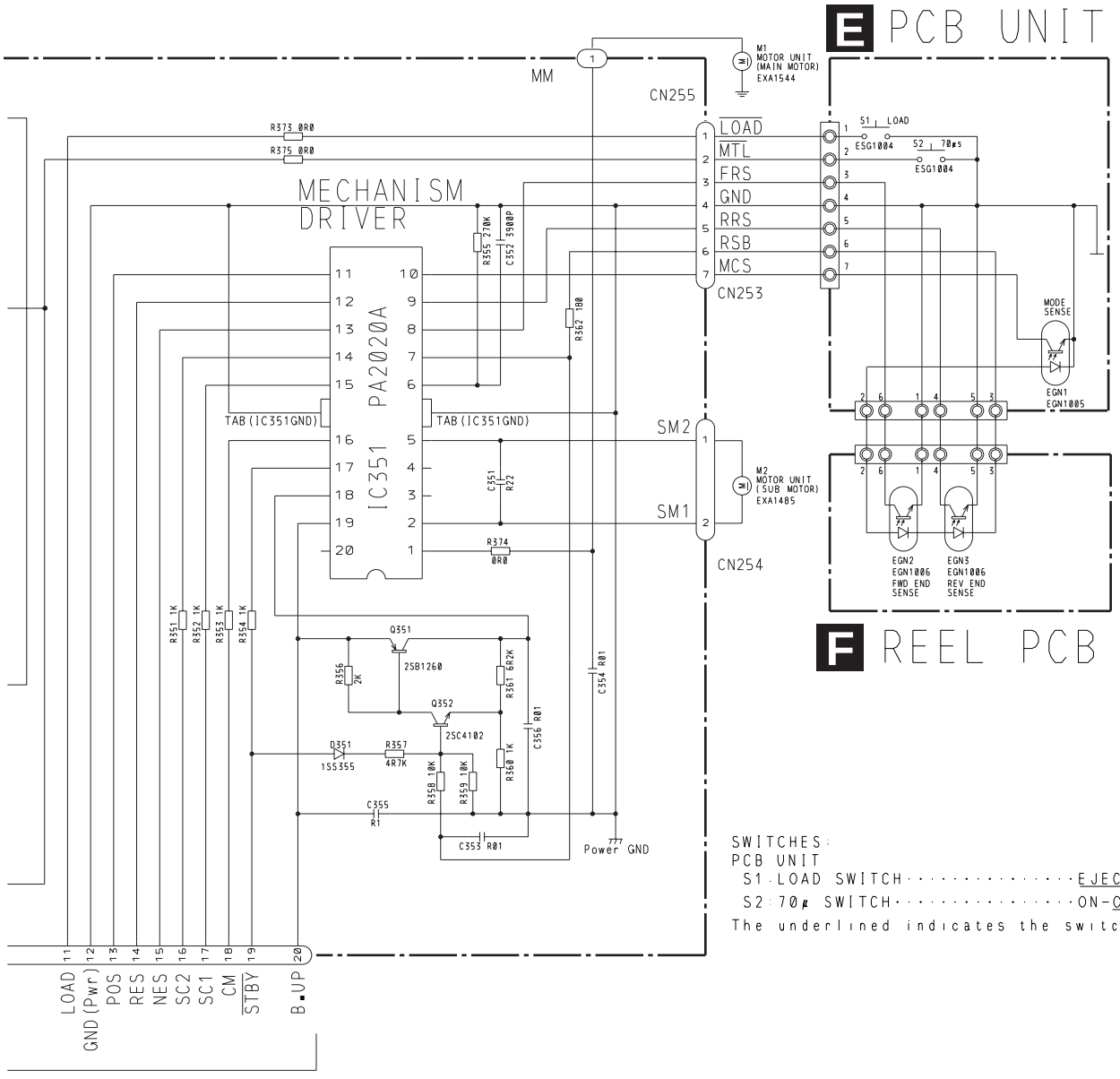
Fig. 7

www.manualscenter.com

3.3 CASSETTE MECHANISM MODULE



www.manualscenter.com



SWITCHES:
PCB UNIT
S1:LOAD SWITCH ..... EJECT-PLAY
S2:70μ SWITCH ..... ON-OFF
The underlined indicates the switch position.

Fig. 8

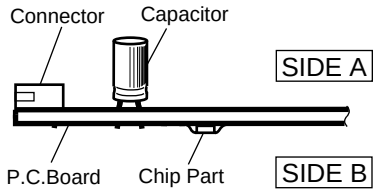
www.manualscenter.com

4. PCB CONNECTION DIAGRAM

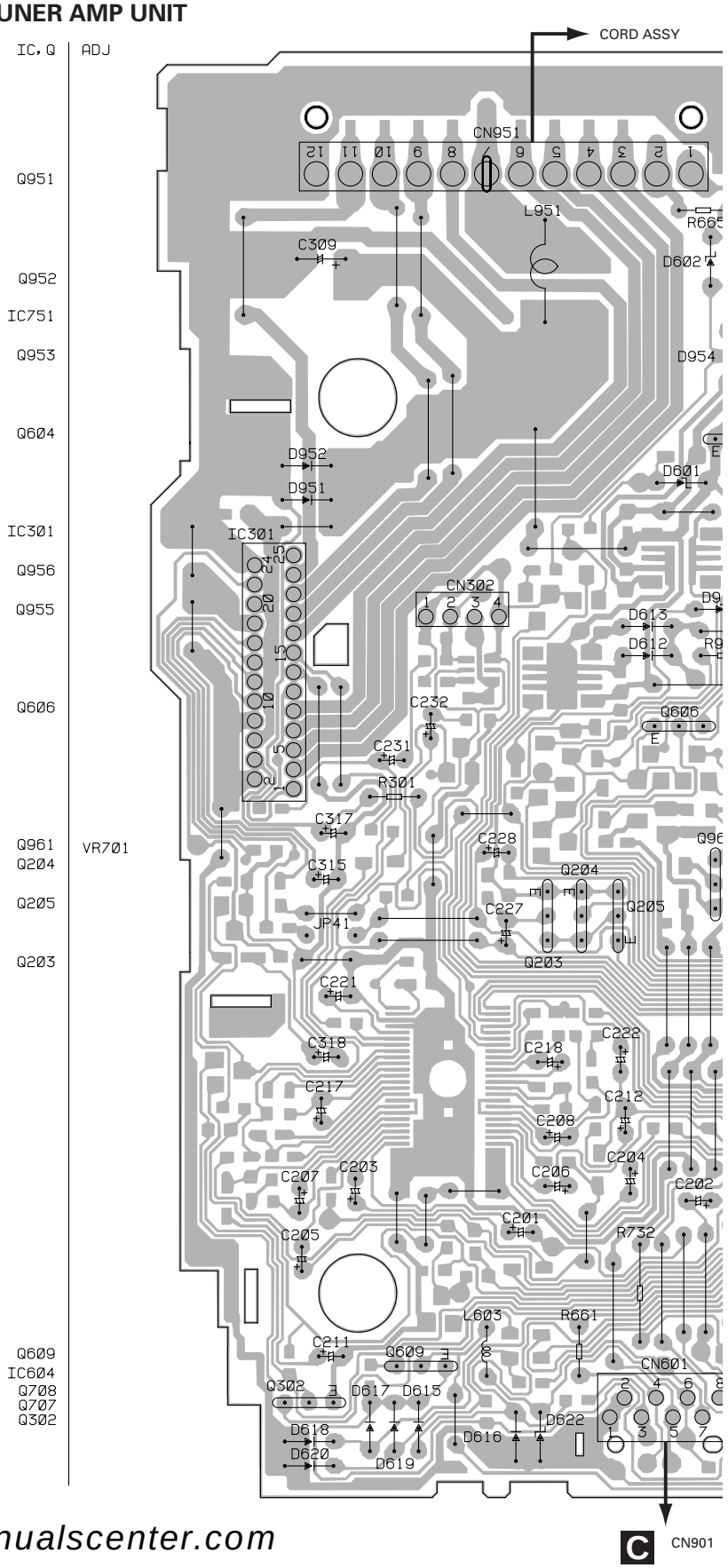
4.1 TUNER AMP UNIT

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams



A **TUNER AMP UNIT**



www.manualscenter.com

SIDE A

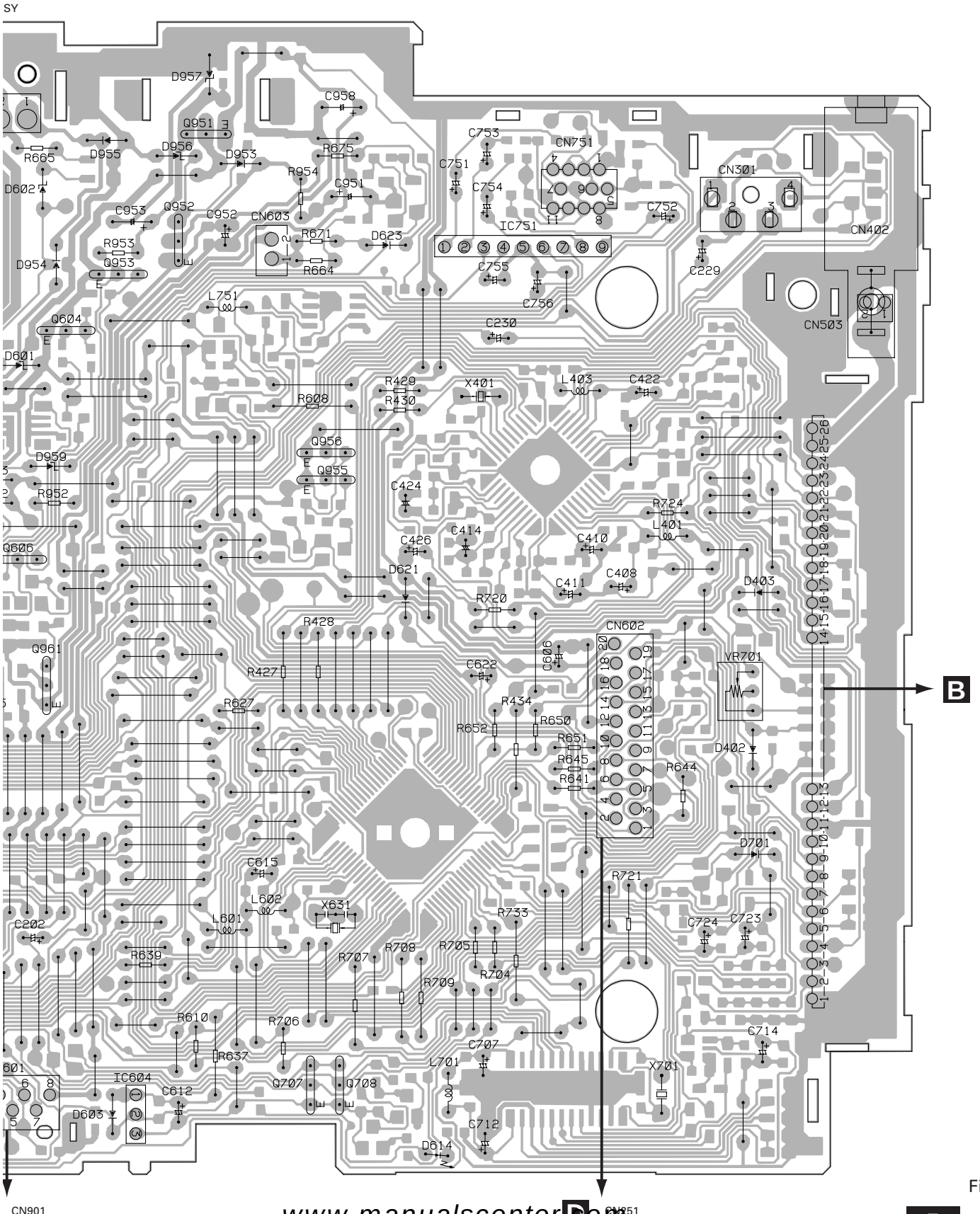
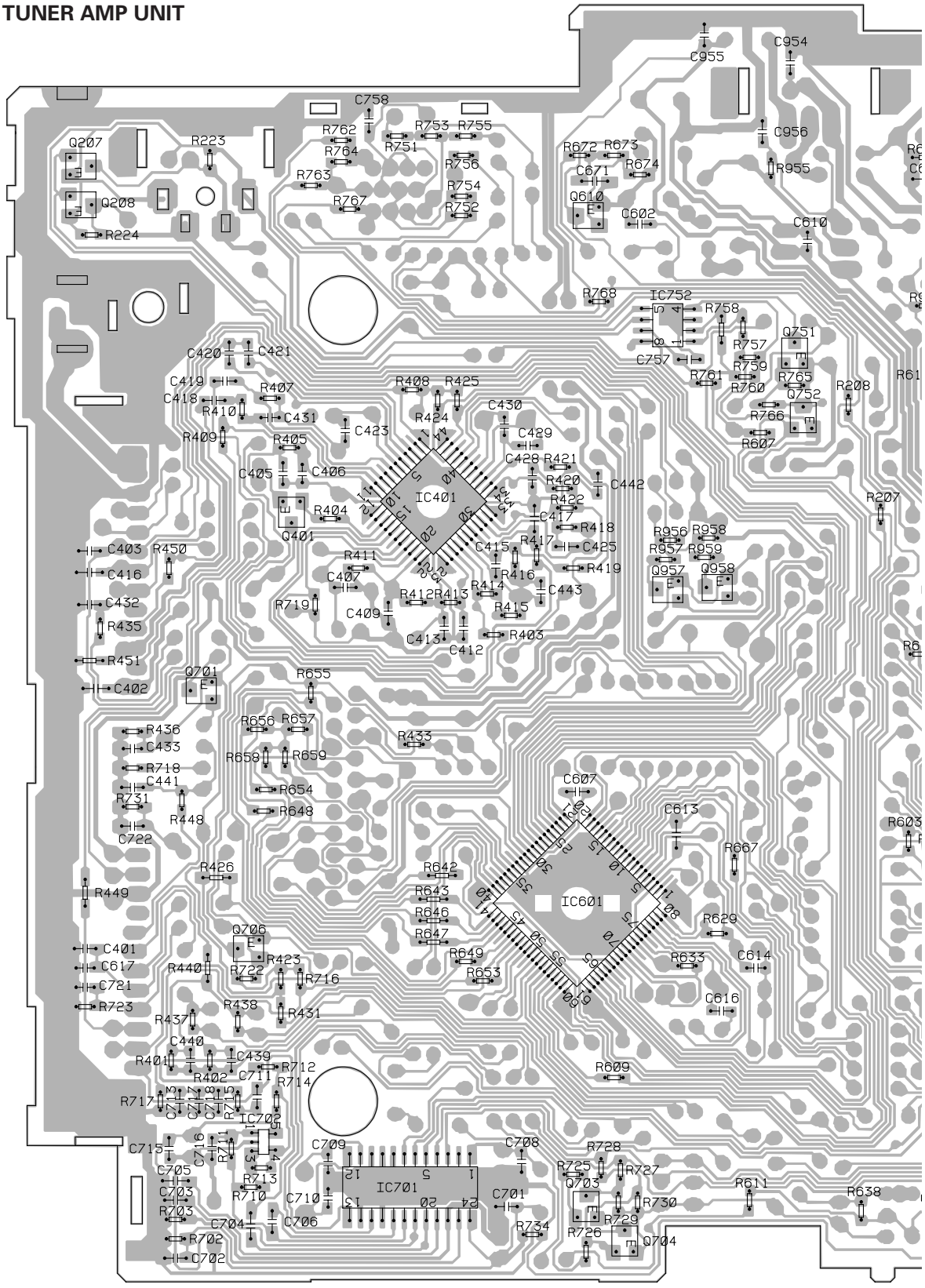


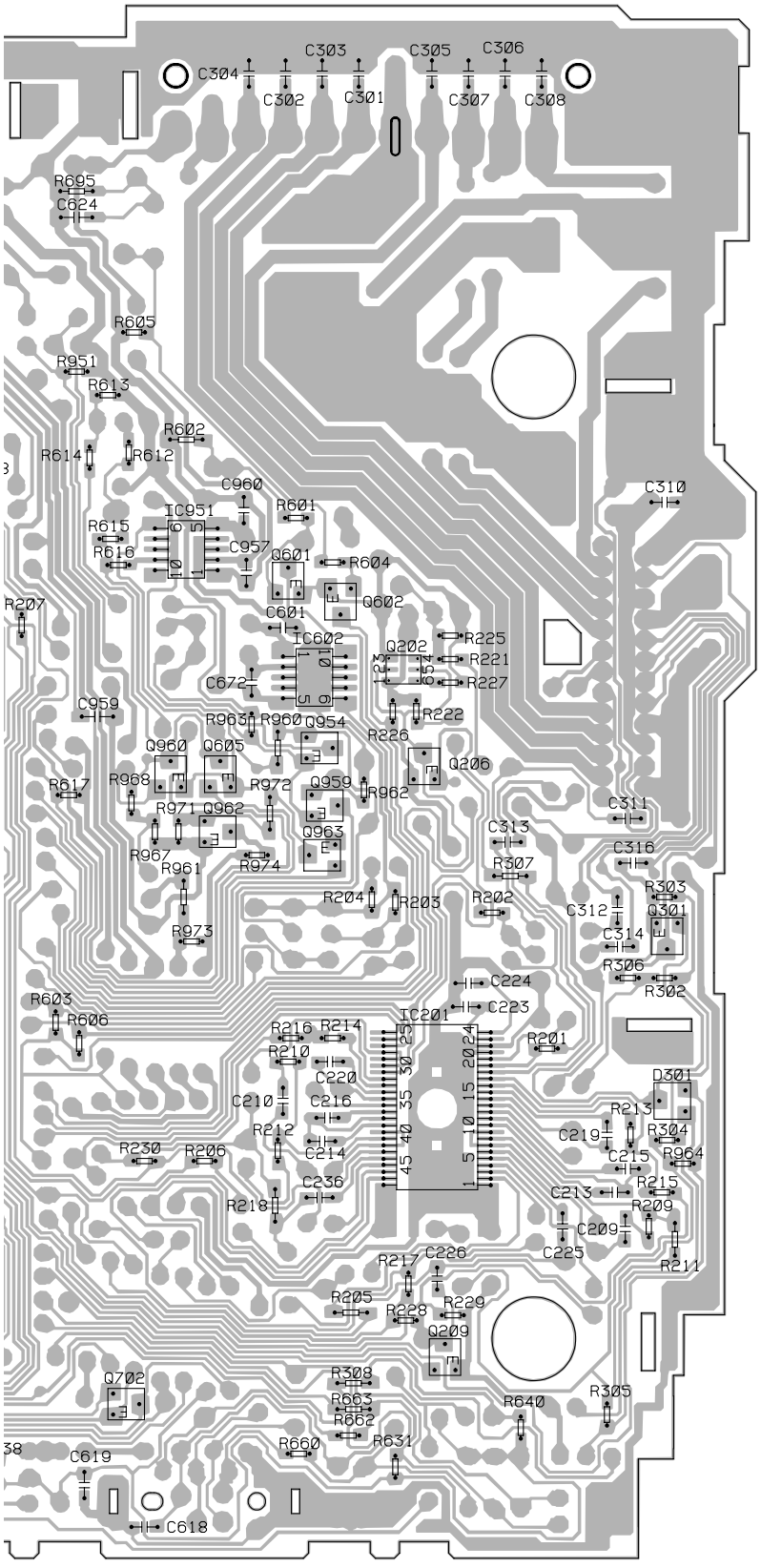
Fig. 9

www.manualscenter.com

A TUNER AMP UNIT



www.manualscenter.com



IC, Q

SIDE B

Q207

Q208 Q610

IC752

Q751

Q752

IC951 Q601

Q901 Q902

IC401 Q602

Q401 Q202

IC602

Q957 Q958

Q954

Q960 Q605

Q959 Q206

Q701 Q962

Q963

Q301

IC201

IC601

Q706

Q209

IC702

Q702

IC701 Q703

Q704

Fig. 10

www.manualscenter.com

4.2 KEYBOARD UNIT

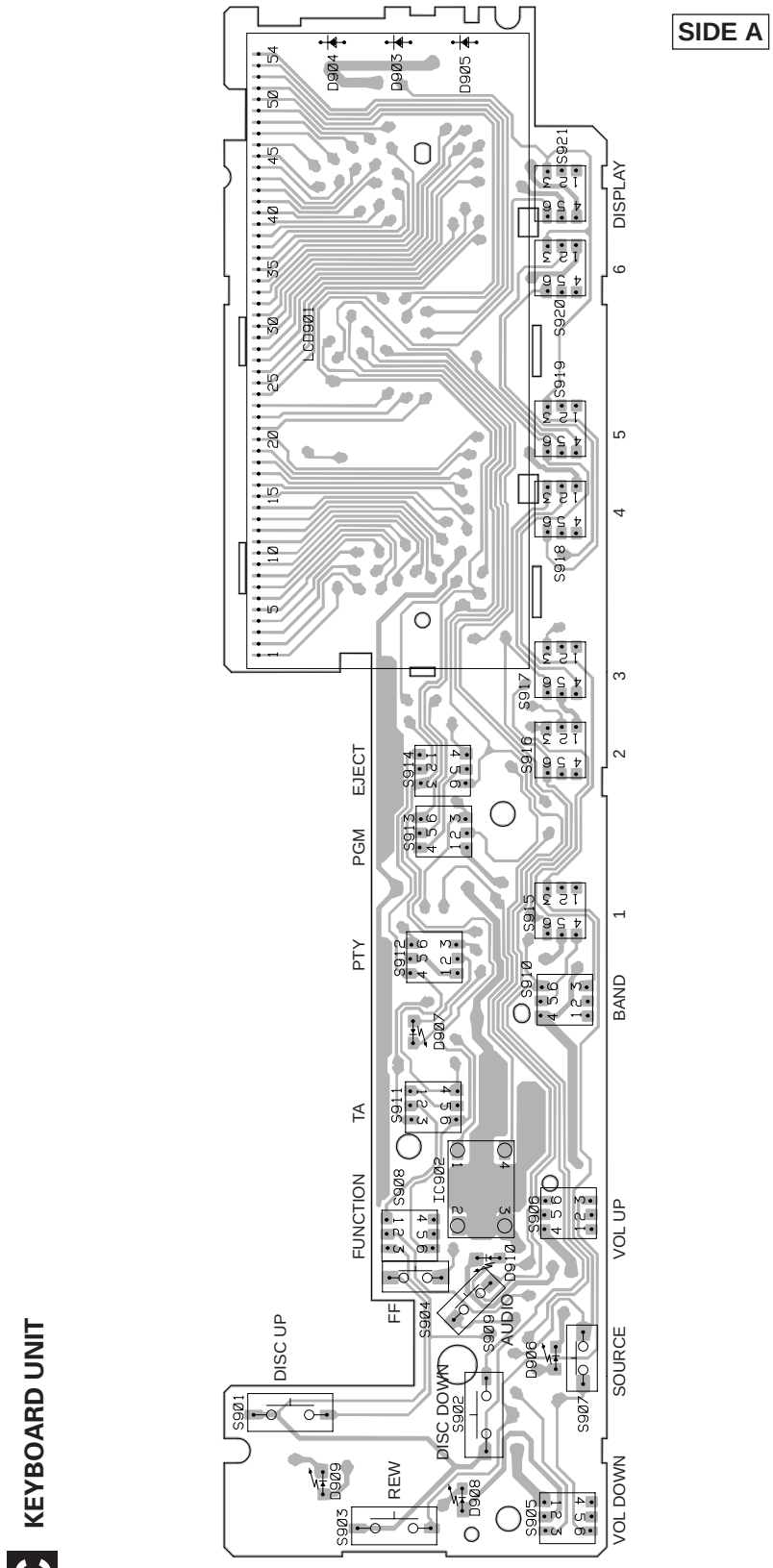


Fig. 11

www.manualscenter.com

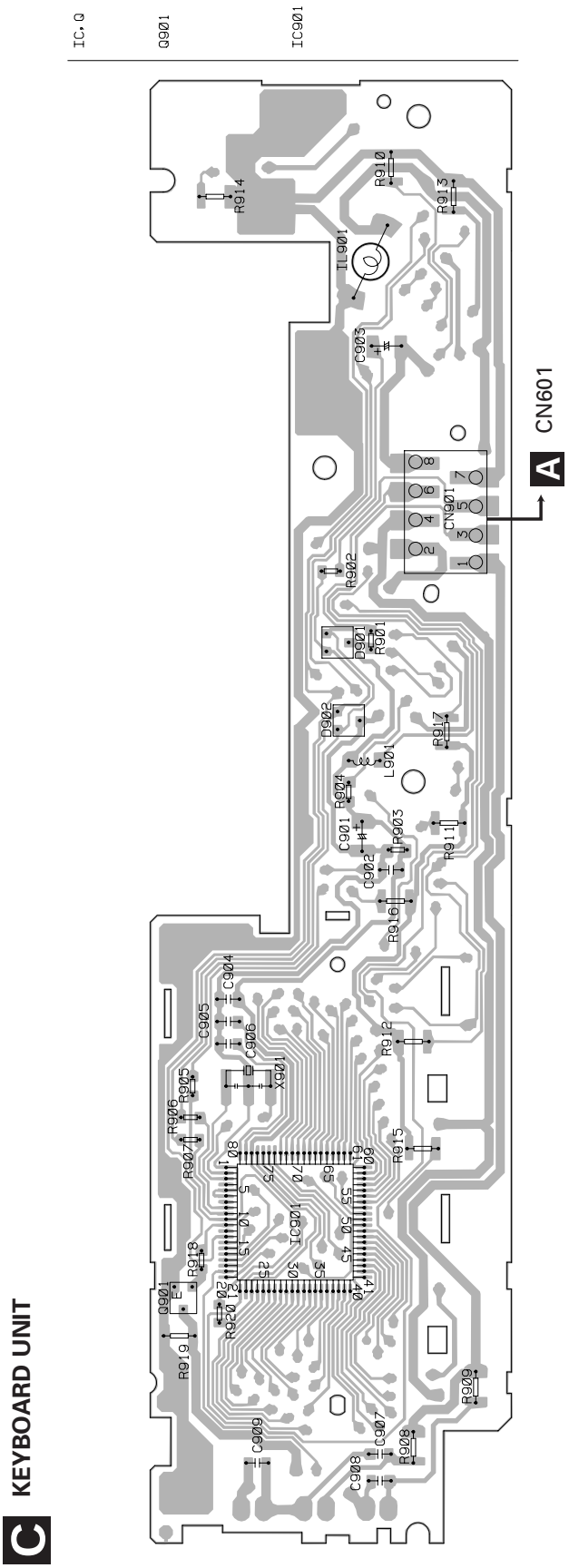


Fig. 12

www.manualscenter.com

4.3 FM/AM TUNER UNIT

www.manualscenter.com

SIDE A

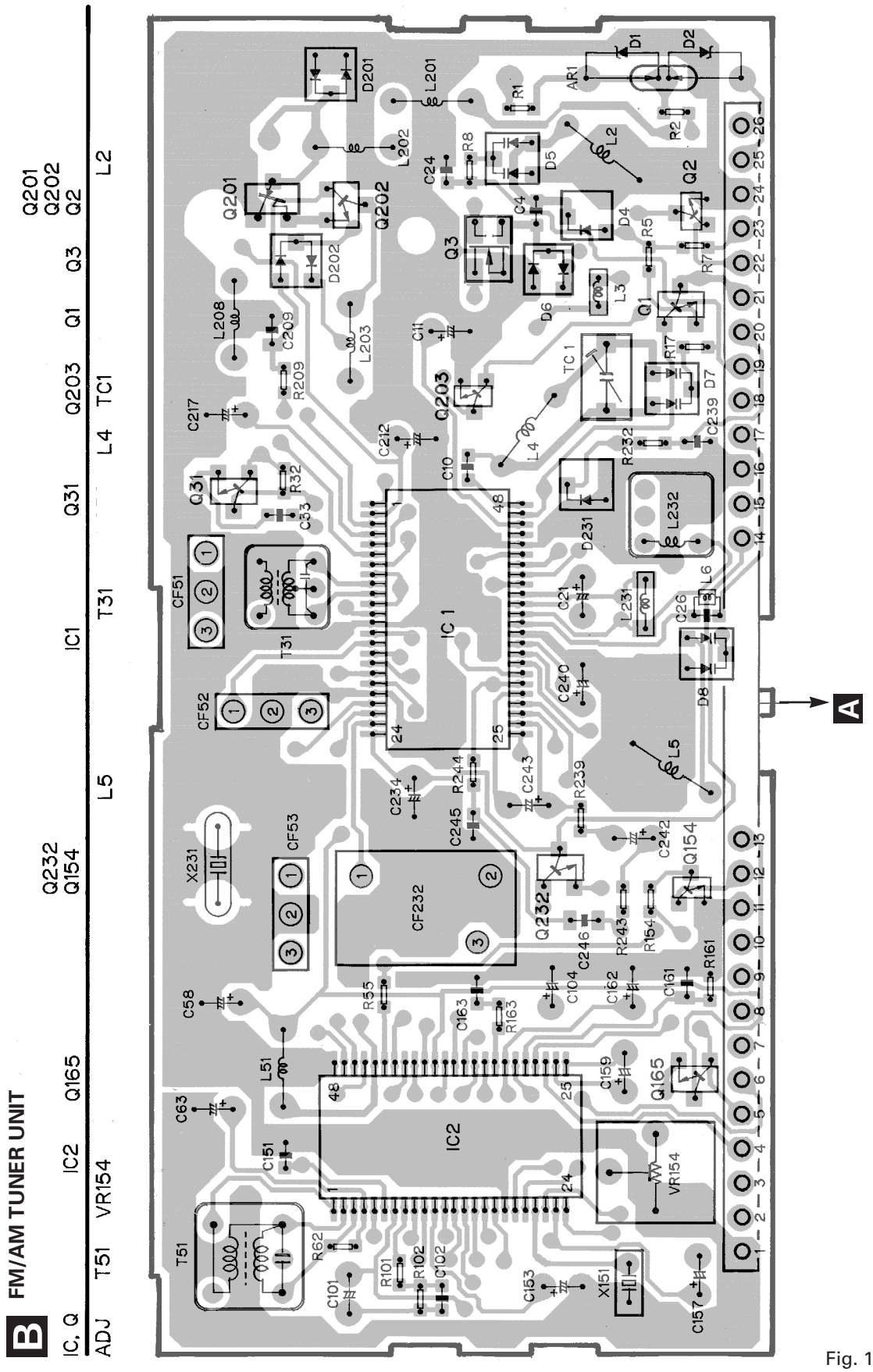
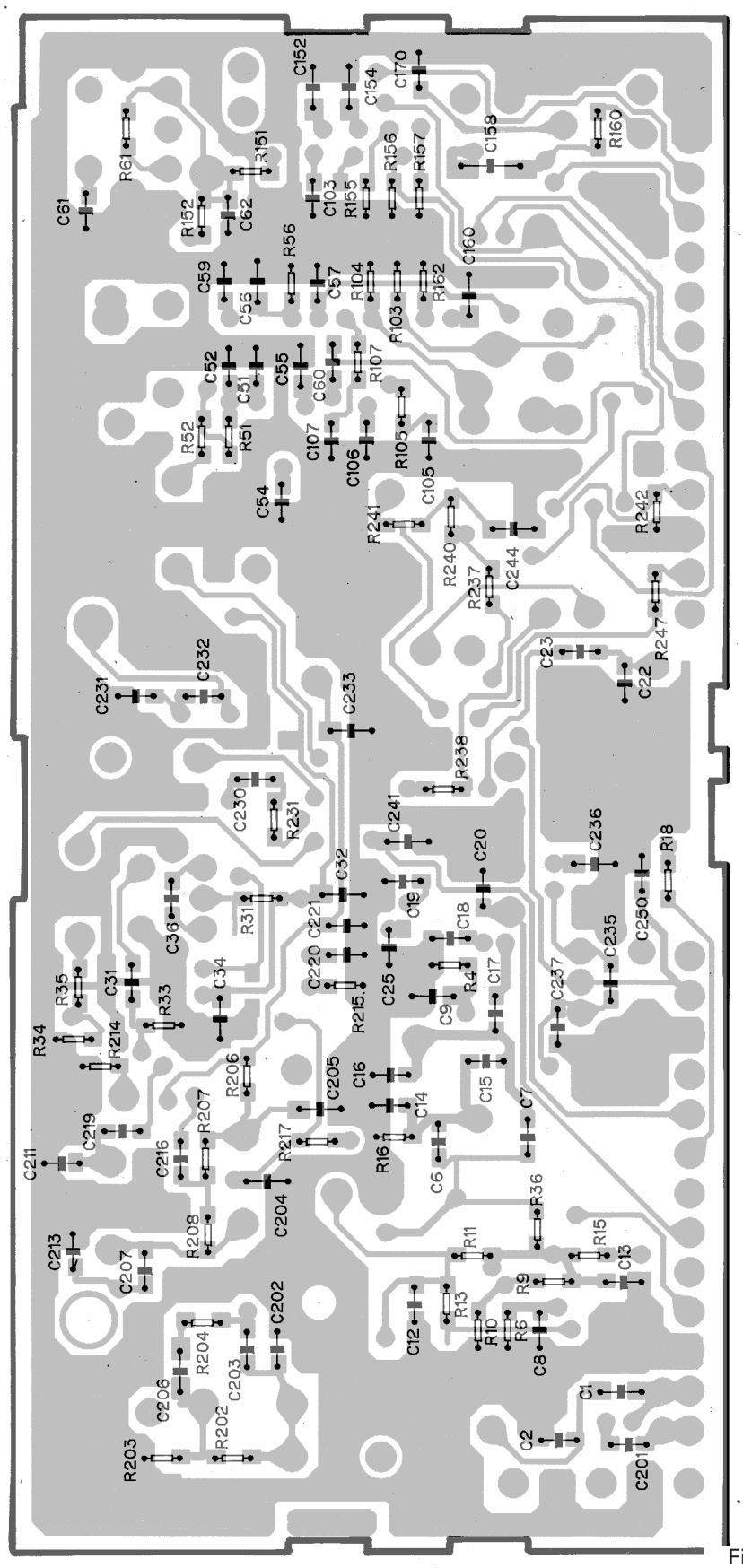


Fig. 13

www.manualscenter.com

SIDE B



B FM/AM TUNER UNIT

Fig. 14

4.4 CASSETTE MECHANISM MODULE

www.manualscenter.com

D DECK UNIT

SIDE A

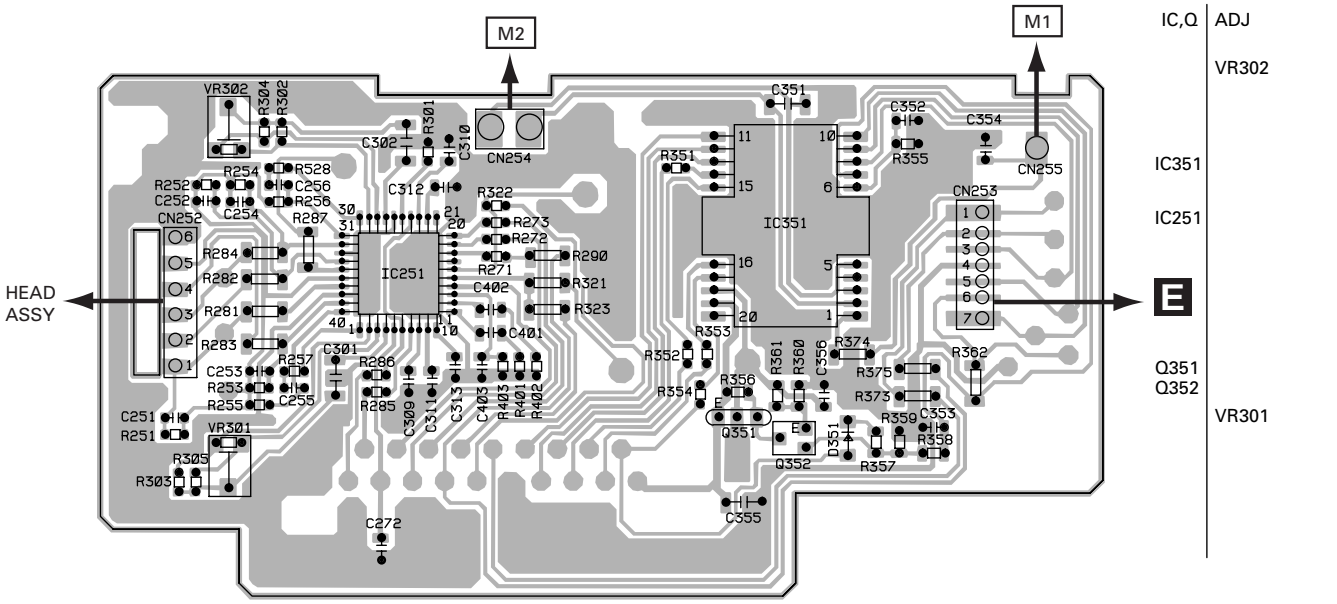


Fig. 15

D DECK UNIT

SIDE B

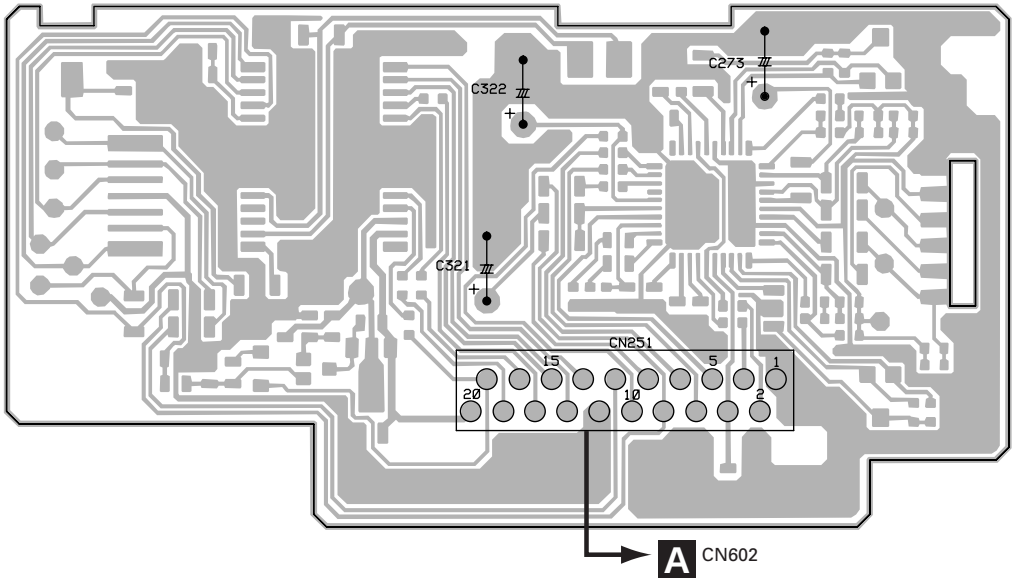


Fig. 16

www.manualscenter.com

E PCB UNIT

SIDE A

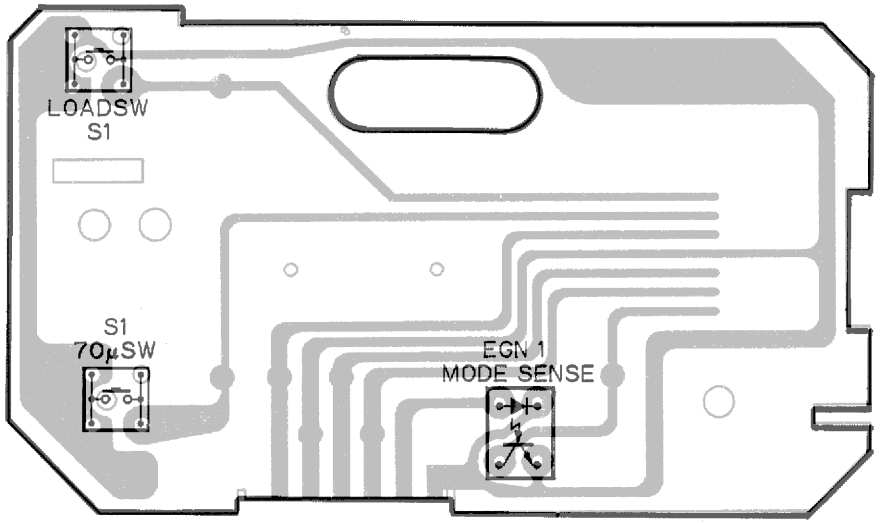


Fig. 17

E PCB UNIT

SIDE B

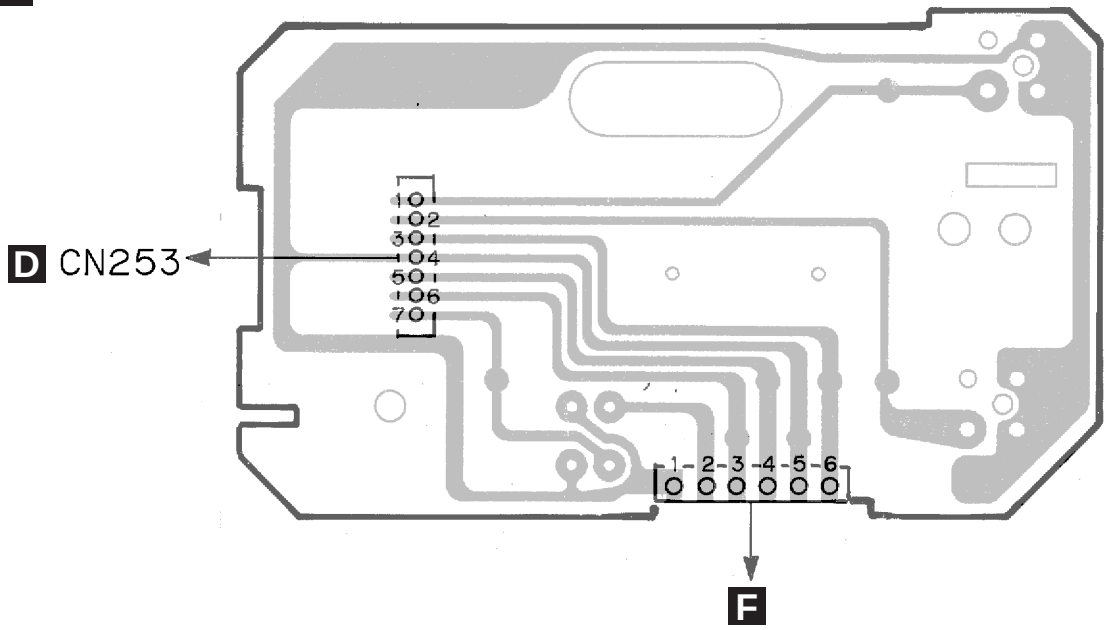


Fig. 18

F REEL PCB

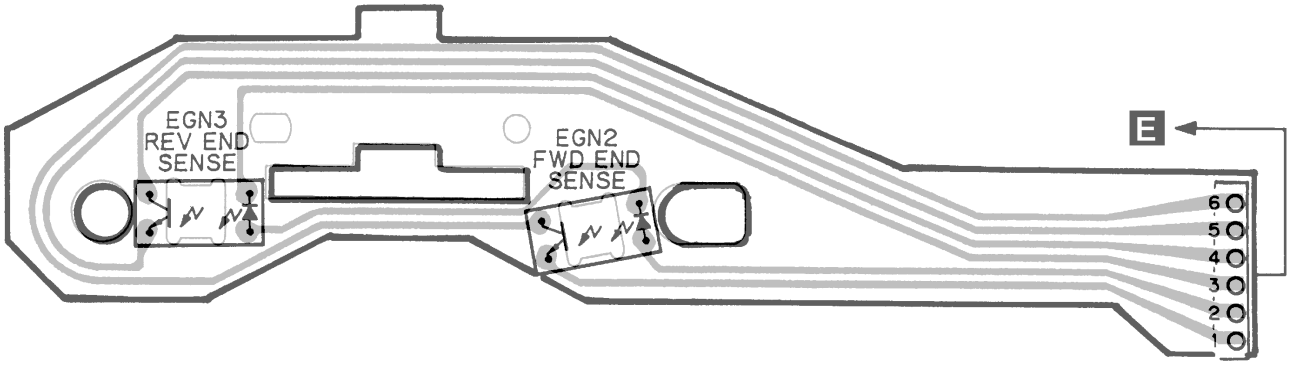


Fig. 19

www.manualscenter.com

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○J,RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

B Unit Number : CWE1466
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

=====Circuit Symbol and No.		===Part Name	Part No.
IC	1	IC	PA4023B
IC	2	IC	PA4024A
Q	1	Transistor	2SC2412KLN
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	31	Transistor	2SC2412KLN
Q	154	Transistor	DTC124EU
Q	165	Transistor	2SC2412KLN
Q	201	FET	2SK932
Q	202	Transistor	2SC2412KLN
Q	203	Transistor	DTC124EU
D	4	Diode	1SV250
D	5	Diode	KV1410-F1
D	6	Diode	MA157
D	7	Diode	KV1410-F1
D	8	Diode	KV1410-F1
D	201	Diode	MA157
D	202	Diode	MA157
D	231	Diode	SVC253
L	2	Coil	CTC1133
L	3	Inductor	LCTB2R2K2125
L	4	Coil	CTC1133
L	5	Coil	CTC1132
L	6	Inductor	LCTBR15K1608
L	51	Ferri-Inductor	LAU150K
L	201	Ferri-Inductor	LAU4R7K
L	202	Ferri-Inductor	LAU330K
L	203	Inductor	CTF1287
L	208	Inductor	LAU121K
L	231	Inductor	LCTA3R3J3225
T	31	Coil	CTE1116
T	51	Coil	CTC1136
TC	1	Capacitor	CCL1038
CF	51	Ceramic Filter	CTF1292
CF	52	Ceramic Filter	CTF1292
CF	53	Ceramic Filter	CTF1292
CF	232	Ceramic Filter	CTF1348
X	151	Resonator 920.5kHz	CSS1365
X	231	Crystal Resonator 10.26MHz	CSS1111
VR	154	Semi-fixed 150kΩ(B)	CCP1213
AR	1	Capacitor with Discharge Gap	DSP-201M

RESISTORS

=====Circuit Symbol and No.		===Part Name	Part No.
R	1		RS1/16S0R0J
R	4		RS1/16S154J
R	5		RS1/16S391J
R	6		RS1/16S223J
R	7		RS1/16S123J
R	8		RS1/16S332J
R	9		RS1/16S473J
R	10		RS1/16S223J
R	11		RS1/16S124J
R	13		RS1/16S563J
R	15		RS1/16S271J
R	16		RS1/16S104J
R	17		RS1/16S332J
R	18		RS1/16S332J
R	31		RS1/16S470J
R	32		RS1/16S822J
R	33		RS1/16S822J
R	34		RS1/16S331J
R	35		RS1/16S331J
R	51		RS1/16S271J
R	52		RS1/16S560J
R	55		RS1/16S102J
R	56		RS1/16S823J
R	61		RS1/16S392J
R	62		RS1/16S393J
R	101		RS1/16S272J
R	102		RS1/16S682J
R	103		RS1/16S333J
R	104		RS1/16S334J
R	105		RS1/16S683J
R	107		RS1/16S222J
R	151		RS1/16S222J
R	152		RS1/16S393J
R	154		RS1/16S104J
R	155		RS1/16S273J
R	156		RS1/16S243J
R	157		RS1/16S203J
R	160		RS1/16S222J
R	161		RS1/16S563J
R	162		RS1/16S105J
R	163		RS1/16S222J
R	202		RS1/16S223J
R	203		RS1/16S225J
R	204		RS1/16S103J
R	206		RS1/16S220J
R	207		RS1/16S101J
R	208		RS1/16S102J
R	209		RS1/16S471J
R	214		RS1/16S822J
R	215		RS1/16S822J
R	217		RS1/16S102J
R	231		RS1/16S272J
R	232		RS1/16S473J
R	237		RS1/16S103J
R	238		RS1/16S104J
R	239		RS1/16S104J
R	240		RS1/16S332J
R	241		RS1/16S202J
R	243		RS1/16S123J
R	244		RS1/16S103J

=====Circuit Symbol and No.	===Part Name	Part No.
R 247		RS1/16S123J
CAPACITORS		
C 1		CCSQCH6R0D50
C 2		CCSRCK2R0C50
C 4		CCSRCH820J50
C 6		CCSRCH820J50
C 8		CKSRYB103K25
C 9		CKSQYB104K16
C 10		CCSRCKR50C50
C 11		CEJA1R0M50
C 12		CKSRYB222K50
C 13		CKSRYB222K50
C 14		CCSRCH220J50
C 16		CCSRCH8R0D50
C 17		CKSRYB222K50
C 18		CKSRYB103K25
C 19		CKSRYB222K50
C 20		CKSRYB222K50
C 21		CEJA100M16
C 22		CCSRTH9R0D50
C 23		CCSRTH120J50
C 24		CCSRCH471J50
C 25		CKSRYB103K25
C 31		CKSRYB103K25
C 32		CKSQYB472K50
C 33		CCSRCH5R0C50
C 34		CKSQYB104K16
C 36		CCSRRH201J50
C 51		CKSRYB223K25
C 52		CKSRYB103K25
C 54		CCSRCH470J50
C 55		CKSQYB223K25
C 56		CKSQYB104K16
C 57		CKSRYB472K50
C 58		CEJA330M10
C 59		CKSRYB103K25
C 61		CCSRCH270J50
C 62		CKSRYB103K25
C 63		CEJAR15M50
C 101		CEJANP100M10
C 102		CKSRYB182K50
C 103		CKSRYB682K25
C 104		CEJA2R2M50
C 105		CKSRYB103K25
C 106		CCSRCH151J50
C 107		CKSRYB103K25
C 151		CKSRYB472K50
C 152		CKSQYB104K16
C 153		CEJA3R3M50
C 154		CKSQYB104K16
C 157		CEJA3R3M50
C 158		CKSYB474K16
C 159		CEJA220M6R3
C 160		CKSQYB104K16
C 161		CKSQYB104K16
C 162		CEJA3R3M50
C 163		CKSRYB102K50
C 170		CCSRCH100D50
C 201		CCSRCH471J50
C 202		CCSRCH100D50
C 203		CKSRYB332K50
C 204		CKSQYB473K16
C 205		CKSQYB473K16
C 206		CKSQYB104K16
C 207		CCSRCH560J50
C 209		CKSQYB104K16
C 211		CCSRCH101J50
C 212		CEJA470M6R3
C 213		CKSRYB103K25
C 216		CCSRCH101J50
C 217		CEJA1R5M50
C 219		CCSRCH471J50
C 220		CKSRYB103K25
C 230		CKSRYB103K25
C 231		CCSRCH330J50
C 232		CCSRCH150J50
C 233		CKSQYB104K16
C 234		CEJA330M10
C 235		CKSRYB332K50
C 236		CKSQYB473K16
C 237		CCSRCH120J50
C 239		CKSRYB472K50
C 240		CEJAR47M50
C 241		CKSQYB104K16
C 242		CEJAR47M50
C 243		CEJAR33M50
C 244		CKSQYB473K16
C 245		CKSRYB123K25
C 246		CKSQYB473K16
C 250		CCSRCH471J50

A Unit Number : CWM5669
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC 201	IC		SN761027DL
IC 301	IC		TDA7384
IC 401	IC		PM2007A
IC 601	IC		PD4914A
IC 604	IC		S-80734AN
IC 701	IC		PM4006B
IC 702	IC		TA75S393F
IC 751	IC		TA2050S
IC 752	IC		CA0008AM
IC 951	IC		TPD1018F
Q 203	Transistor		DTC114TS
Q 204	Transistor		DTC114TS
Q 205	Transistor		DTA124ES
Q 206	Transistor		DTA124EK
Q 207	Transistor		DTC143TK
Q 208	Transistor		DTC143TK
Q 209	Transistor		DTC114EK
Q 301	Transistor		DTC124EK
Q 302	Transistor		2SC1740S
Q 401	Transistor		2SC2412K
Q 601	Transistor		2SC2412K
Q 602	Transistor		2SC2412K
Q 604	Transistor		2SA933S
Q 605	Transistor		DTC124EK
Q 606	Transistor		2SC1740S
Q 609	Transistor		2SA933S
Q 701	Transistor		DTC143TK
Q 702	Transistor		DTC114EK
Q 703	Transistor		2SD1757K
Q 704	Transistor		2SD1757K
Q 706	Transistor		2SC2412K
Q 707	Transistor		DTC143TS
Q 708	Transistor		DTC143TS
Q 751	Transistor		2SA1037K
Q 752	Transistor		DTC114EK
Q 951	Transistor		2SD2396
Q 952	Transistor		2SD2037
Q 953	Transistor		2SA933S
Q 954	Transistor		DTC114EK
Q 955	Transistor		2SA1674

www.manualscenter.com

Circuit Symbol and No.		Part Name	Part No.
Q	956	Transistor	2SA1048
Q	957	Transistor	DTC114TK
Q	958	Transistor	DTC114TK
Q	959	Transistor	2SC2412K
Q	960	Transistor	DTC114TK
Q	961	Transistor	2SB1243
D	301	Diode	MA152WK
D	403	Diode	1SS270
D	601	Diode	HZS7L(C2)
D	602	Diode	HZS7L(A1)
D	603	Diode	1SS270
D	614	LED	BR4361F
D	615	Diode	1SS270
D	616	Diode	1SS270
D	617	Diode	1SS270
D	618	Diode	1SS270
D	619	Diode	1SS270
D	620	Diode	1SS270
D	621	Diode	1SS270
D	622	Diode	HZS7L(A1)
D	701	Diode	1SS270
D	951	Diode	1SR139-400
D	952	Diode	1SR139-400
D	953	Diode	1SR139-400
D	954	Diode	1SR139-400
D	955	Diode	1SR139-400
D	956	Diode	HZS6L(B2)
D	957	Diode	HZS9L(B3)
D	959	Diode	HZS9L(A2)
L	401	Ferri-Inductor	LAU2R2K
L	403	Ferri-Inductor	LAU2R2K
L	601	Ferri-Inductor	LAU2R2K
L	602	Ferri-Inductor	LAU2R2K
L	603	Ferri-Inductor	LAU2R2K
L	701	Ferri-Inductor	LAU101K
L	751	Ferri-Inductor	LAU2R2K
L	951	Choke Coil 600µH	CTH1168
X	401	Crystal Resonator 7.200MHz	CSS1379
X	631	Ceramic Resonator 6.29MHz	CSS1310
X	701	Crystal Resonator 4.332MHz	CSS1056
VR	701	Semi-fixed 22kΩ(B)	CCP1321
		FM/AM Tuner Unit	CWE1466

RESISTORS

Circuit Symbol and No.		Part Name	Part No.
R	201		RS1/10S821J
R	202		RS1/10S821J
R	203		RS1/10S104J
R	204		RS1/10S104J
R	205		RS1/8S563J
R	206		RS1/10S563J
R	207		RS1/10S152J
R	208		RS1/10S152J
R	209		RS1/10S272J
R	210		RS1/10S272J
R	211		RS1/8S151J
R	212		RS1/10S151J
R	213		RS1/10S221J
R	214		RS1/10S221J
R	215		RS1/10S104J
R	216		RS1/10S104J
R	217		RS1/10S103J
R	218		RS1/8S102J
R	223		RS1/10S473J
R	224		RS1/10S473J
R	228		RS1/10S123J
R	229		RS1/10S392J
R	230		RS1/10S392J
R	301		RD1/4PU103J
R	302		RS1/10S221J
R	303		RS1/10S153J
R	304		RS1/10S103J
R	305		RS1/10S152J
R	306		RS1/10S101J
R	307		RS1/8S562J
R	308		RS1/8S223J
R	401		RS1/10S272J
R	402		RS1/10S272J
R	403		RS1/10S102J
R	404		RS1/10S222J
R	405		RS1/10S222J
R	407		RS1/10S0R0J
R	408		RS1/10S562J
R	409		RS1/10S222J
R	410		RS1/10S102J
R	411		RS1/10S682J
R	412		RS1/10S472J
R	413		RS1/10S222J
R	414		RS1/10S682J
R	415		RS1/10S472J
R	416		RS1/10S561J
R	417		RS1/10S103J
R	418		RS1/10S152J
R	419		RS1/10S222J
R	420		RS1/10S392J
R	421		RS1/10S272J
R	422		RS1/10S392J
R	423		RS1/10S473J
R	424		RS1/10S473J
R	425		RS1/10S472J
R	426		RS1/8S473J
R	427		RD1/4PU102J
R	428		RD1/4PU102J
R	429		RD1/4PU102J
R	430		RD1/4PU102J
R	431		RS1/10S472J
R	433		RS1/10S104J
R	434		RD1/4PU222J
R	435		RS1/10S103J
R	436		RS1/10S393J
R	440		RS1/8S0R0J
R	448		RS1/10S102J
R	449		RS1/8S0R0J
R	450		RS1/10S680J
R	451		RS1/8S0R0J
R	601		RS1/10S223J
R	602		RS1/8S473J
R	603		RS1/10S473J
R	604		RS1/10S223J
R	605		RS1/10S473J
R	606		RS1/10S473J
R	607		RS1/10S0R0J
R	609		RS1/10S0R0J
R	611		RS1/10S751J
R	612		RS1/10S103J
R	613		RS1/10S223J
R	614		RS1/10S223J
R	615		RS1/10S223J
R	616		RS1/10S272J
R	617		RS1/10S473J
R	629		RS1/10S0R0J
R	631		RS1/10S473J
R	633		RS1/10S473J
R	637		RD1/4PU102J
R	638		RS1/10S124J
R	639		RD1/4PU222J
R	640		RS1/10S223J
R	641		RD1/4PU222J
R	642		RS1/8S103J
R	643		RS1/8S222J

Circuit Symbol and No.		Part Name	Part No.
R	644		RD1/4PU222J
R	645		RD1/4PU103J
R	646		RS1/8S222J
R	647		RS1/8S222J
R	648		RS1/10S222J
R	649		RS1/10S222J
R	650		RD1/4PU222J
R	651		RD1/4PU222J
R	652		RD1/4PU222J
R	653		RS1/10S222J
R	654		RS1/10S473J
R	655		RS1/10S473J
R	656		RS1/10S473J
R	657		RS1/10S473J
R	658		RS1/10S103J
R	659		RS1/10S392J
R	660		RS1/10S472J
R	661		RD1/4PU472J
R	662		RS1/10S222J
R	663		RS1/8S222J
R	664		RD1/4PU102J
R	665		RD1/4PU102J
R	667		RS1/10S102J
R	695		RS1/8S472J
R	702		RS1/10S333J
R	703		RS1/10S0R0J
R	704		RD1/4PU102J
R	705		RD1/4PU102J
R	706		RD1/4PU102J
R	707		RD1/4PU102J
R	708		RD1/4PU102J
R	709		RD1/4PU102J
R	710		RS1/10S222J
R	711		RS1/10S222J
R	712		RS1/10S681J
R	713		RS1/10S684J
R	714		RS1/10S562J
R	715		RS1/10S562J
R	716		RS1/10S104J
R	717		RS1/10S104J
R	718		RS1/10S103J
R	719		RS1/10S473J
R	720		RD1/4PU102J
R	721		RD1/4PU102J
R	722		RS1/10S562J
R	723		RS1/10S105J
R	724		RD1/4PU0R0J
R	725		RS1/10S224J
R	726		RS1/10S224J
R	727		RS1/10S222J
R	728		RS1/10S222J
R	729		RS1/10S223J
R	730		RS1/10S223J
R	731		RS1/10S224J
R	732		RD1/4PU152J
R	733		RD1/4PU102J
R	734		RS1/10S0R0J
R	751		RS1/10S181J
R	752		RS1/10S181J
R	753		RS1/10S223J
R	754		RS1/10S223J
R	755		RS1/10S102J
R	756		RS1/10S102J
R	757		RS1/10S102J
R	758		RS1/8S102J

Circuit Symbol and No.		Part Name	Part No.
R	759		RS1/10S473J
R	760		RS1/10S473J
R	761		RS1/10S102J
R	762		RS1/10S101J
R	763		RS1/10S101J
R	764		RS1/10S620J
R	765		RS1/10S223J
R	766		RS1/10S472J
R	767		RS1/10S222J
R	768		RS1/10S0R0J
R	951		RS1/10S473J
R	952		RD1/4PU102J
R	953		RD1/4PU471J
R	954		RD1/4PU101J
R	955		RS1/10S472J
R	956		RS1/10S473J
R	957		RS1/10S102J
R	958		RS1/10S473J
R	959		RS1/10S102J
R	960		RS1/8S103J
R	961		RS1/8S1R0J
R	962		RS1/10S103J
R	963		RS1/10S223J
R	964		RS1/10S152J
R	967		RS1/10S473J
R	968		RS1/10S102J
R	973		RS1/10S0R0J

CAPACITORS

C	201		CEJA2R2M50
C	202		CEJA2R2M50
C	203		CEJA1R0M50
C	204		CEJA1R0M50
C	205		CEJA4R7M35
C	206		CEJA4R7M35
C	207		CEJA100M16
C	208		CEJA100M16
C	209		CKSQYB822K50
C	210		CKSQYB822K50
C	211		CEJA1R0M50
C	212		CEJA1R0M50
C	213		CKSQYB183K25
C	214		CKSQYB183K25
C	215		CKSQYB102K50
C	216		CKSQYB102K50
C	217		CEJA2R2M50
C	218		CEJA2R2M50
C	219		CKSQYB333K25
C	220		CKSQYB333K25
C	221		CEJA220M10
C	222		CEJA220M10
C	223		CKSQYF104Z25
C	225		CKSQYB473K16
C	226		CKSQYB102K50
C	227		CEJA2R2M50
C	228		CEJA2R2M50
C	229		CEJA2R2M50
C	230		CEJA2R2M50
C	236		CKSQYB473K16
C	309	3300µF/16V	CCH1018
C	310		CKSQYB104K16
C	311		CKSQYB224K16
C	312		CKSQYB224K16
C	313		CKSQYB224K16

www.manualscenter.com

=====Circuit Symbol and No.		===Part Name	Part No.
C	314		CKSQYB224K16
C	315		CEJA100M16
C	316		CKSQYB224K16
C	317		CEJA1R0M50
C	318		CEJA330M10
C	401		CKSQYB223K25
C	402		CKSYB273K25
C	406		CCSQSL101J50
C	407		CKSQYB102K50
C	408		CEJA220M16
C	409		CKSQYB103K25
C	410		CEJA220M6R3
C	411		CEJA220M16
C	412		CKSQYB103K25
C	413		CKSQYB103K25
C	414	4.7µF/16V	CCH1250
C	415		CKSQYB103K25
C	416		CKLSR473K16
C	418		CKSQYB103K25
C	420		CKSQYB103K25
C	421		CKSQYB103K25
C	422		CEJA220M6R3
C	423		CKSQYB473K16
C	424	4.7µF/16V	CCH1250
C	425		CKSQYB103K25
C	426		CEJAR47M50
C	428		CKSQYB103K25
C	429		CCSQCH150J50
C	430		CCSQCH150J50
C	431		CCSQSL101J50
C	432		CKSQYB103K25
C	439		CKSQYB223K25
C	440		CKSQYB223K25
C	441		CKSQYB223K25
C	442		CKSQYB102K50
C	602		CKSQYB103K25
C	606		CEJA100M16
C	607		CCSQSL101J50
C	612		CEAL2R2M50
C	613		CKSYB102K50
C	614		CCSQSL101J50
C	615		CEJA4R7M35
C	616		CKSQYB103K25
C	619		CKSQYB473K16
C	622		CEJA220M10
C	624		CKSYB102K50
C	701		CKSQYF104Z25
C	702		CKSQYB222K50
C	703		CKSQYB104K16
C	704		CKSYB105K16
C	705		CKSYB104K16
C	706		CKSQYB472K50
C	707		CEJA4R7M35
C	708		CKSQYB104K16
C	709		CCSQCH220J50
C	710		CCSQCH220J50
C	711		CKSQYB104K16
C	712		CEJA4R7M35
C	713		CKSQYB223K25
C	714		CEJA4R7M35
C	715		CKSQYB103K25
C	716		CKSQYB103K25
C	721		CKSQYB471K50
C	722		CKSQYB223K25
C	723		CEAL2R2M50

=====Circuit Symbol and No.		===Part Name	Part No.
C	724		CEJA2R2M50
C	751		CEJA1R0M50
C	752		CEJA1R0M50
C	753		CEJA1R0M50
C	754		CEJA1R0M50
C	755		CEJA100M16
C	756		CEJA100M16
C	757		CKSQYB102K50
C	758		CKSQYB104K16
C	951	470µF/16V	CCH1183
C	952		CEJA470M10
C	953		CEAS101M10
C	954		CKSQYB103K25
C	956		CKSQYB103K25
C	957		CKSQYB103K25
C	958		CEAS101M10
C	959		CKSYB103K50
C	960		CKSQYB472K50

D Unit Number : EWM1016
Unit Name : Deck Unit

MISCELLANEOUS

IC	251	IC	CXA2560Q
IC	351	IC	PA2020A
Q	351	Transistor	2SB1260
Q	352	Transistor	2SC4102
D	351	Diode	1SS355
VR	301	Semi-fixed 33kΩ(B)	CCP1280
VR	302	Semi-fixed 33kΩ(B)	CCP1280

RESISTORS

R	255	RS1/16S221J
R	256	RS1/16S221J
R	257	RS1/16S102J
R	258	RS1/16S102J
R	271	RS1/16S102J
R	272	RS1/16S102J
R	273	RS1/16S102J
R	281	RS1/8S0R0J
R	282	RS1/8S0R0J
R	283	RS1/8S0R0J
R	284	RS1/8S0R0J
R	285	RS1/16S0R0J
R	286	RS1/16S0R0J
R	287	RS1/8S0R0J
R	290	RS1/8S0R0J
R	301	RS1/16S183J
R	322	RS1/16S102J
R	351	RS1/16S102J
R	352	RS1/16S102J
R	353	RS1/16S102J
R	354	RS1/16S102J
R	355	RS1/10S274J
R	356	RS1/10S202J
R	357	RS1/10S472J
R	358	RS1/10S103J
R	359	RS1/10S103J
R	360	RS1/10S102J
R	361	RS1/10S622J
R	362	RS1/8S181J
R	373	RS1/8S0R0J
R	374	RS1/8S0R0J
R	375	RS1/8S0R0J
R	401	RS1/16S472J
R	402	RS1/16S163J
R	403	RS1/16S823J

=====Circuit Symbol and No.		===Part Name	Part No.
CAPACITORS			
C	251		CKSRYB331K50
C	252		CKSRYB331K50
C	253		CKSRYB331K50
C	254		CKSRYB331K50
C	255		CKSRYB103K25
C	256		CKSRYB103K25
C	272		CKSQYB104K16
C	273		CEJA220M16
C	301		CKSYB104K50
C	302		CKSYB104K50
C	309		CKSQYB104K16
C	310		CKSQYB104K16
C	313		CCSQCH101K50
C	351		CKSYB224K25
C	352		CKSQYB392K50
C	353		CKSQYB103K50
C	354		CKSQYB103K50
C	355		CKSYB104K50
C	356		CKSQYB103K50
C	401		CKSQYB334K16
C	402		CKSQYB472K50
C	403		CKSQYB683K16

C Unit Number : CWM5802(KEH-P5700R/X1M/EW)
: CWM5670(KEH-P5730R/X1M/EW)
Unit Name : Keyboard Unit

MISCELLANEOUS			
IC	901	IC	PD6246A
IC	902	IC	RS-140
Q	901	Transistor	2SC2412K
D	901	Chip Diode	MA151WK
D	902	Diode	MA151WA
D	903	LED	NSPWF50SB
D	904	LED	NSPWF50SB
D	905	LED	NSPWF50SB
D	906	LED	See Contrast table
D	907	LED	See Contrast table
D	908	LED	See Contrast table
D	909	LED	See Contrast table
D	910	LED	See Contrast table
L	901	Inductor	LCTA101J3225
X	901	Ceramic Resonator 4.97MHz	CSS1312
S	901	Switch	CSG1043
S	902	Switch	CSG1043
S	903	Switch	CSG1043
S	904	Switch	CSG1041
S	905	Switch	See Contrast table
S	906	Switch	See Contrast table
S	907	Switch	CSG1041
S	908	Switch	See Contrast table
S	909	Switch	CSG1041
S	910	Switch	See Contrast table
S	911	Switch	See Contrast table
S	912	Switch	See Contrast table
S	913	Switch	See Contrast table
S	914	Switch	See Contrast table
S	915	Switch	See Contrast table
S	916	Switch	See Contrast table
S	917	Switch	See Contrast table
S	918	Switch	See Contrast table
S	919	Switch	See Contrast table
S	920	Switch	See Contrast table

=====Circuit Symbol and No.		===Part Name	Part No.
S	921	Switch	See Contrast table
IL	901	Lamp 14V 40mA	See Contrast table
LCD	901	LCD	See Contrast table
RESISTORS			
R	901		RS1/10S222J
R	902		RS1/10S222J
R	903		RS1/10S472J
R	904		RS1/10S121J
R	905		RS1/10S2R2J
R	906		RS1/10S470J
R	907		RS1/10S470J
R	908		RS1/4S511J
R	909		RS1/4S751J
R	910		RS1/4S391J
R	911		RS1/4S391J
R	912		RS1/4S391J
R	913		RS1/4S391J
R	914		RS1/4S391J
R	915		RS1/4S391J
R	916		RS1/4S391J
R	917		RS1/4S391J
R	918		RS1/10S472J
R	919		RS1/4S391J
CAPACITORS			
C	901		CSZSR100M6R3
C	902		CKSQYF104Z50
C	903		CSZSR100M6R3
C	904		CKSQYB103K25
C	905		CKSQYB103K25
C	906		CKSQYB103K25
C	907		CKSQYF104Z50
C	908		CKSQYF104Z50
C	909		CKSQYF104Z50

CONTRAST TABLE of KEYBOARD UNIT

KEH-P5700R/X1M/EW and KEH-P5730/X1M/EW have the same construction except for the following:

Symbol and Description		Part No. KEH-P5700R/X1M/EW	Part No. KEH-P5730R/X1M/EW
LCD 901	LCD	CAW1457	CAW1478
IL 901	Lamp	CEL1558(14V 40mA)	CEL1508(14V 40mA)
D 906 – 910	Diode	CL170PGCD	CL170DCD
S 905,908,916	Switch	CSG1084	CSG1078
S 906,910,915	Switch	CSG1085	CSG1079
S 911 – 914	Switch	CSG1086	CSG1080
S 917,919,921	Switch	CSG1085	CSG1079
S 918,920	Switch	CSG1084	CSG1078

E Unit Number :
Unit Name : PCB Unit

S	1	Switch (Load)	ESG1004
S	2	Switch (70µS)	ESG1004
EGN	1	Photo-Interrupter	EGN1005

F Unit Number :
Unit Name : Reel PCB

EGN	2	Photo-Interrupter	EGN1006
EGN	3	Photo-Interrupter	EGN1006

Miscellaneous Parts List

M	1	Motor Unit (Main)	EXA1544
M	2	Motor Unit (Sub)	EXA1485
HD	1	Head Assy	EXA1506

www.manualscenter.com

6. ADJUSTMENT

● **Connection Diagram**

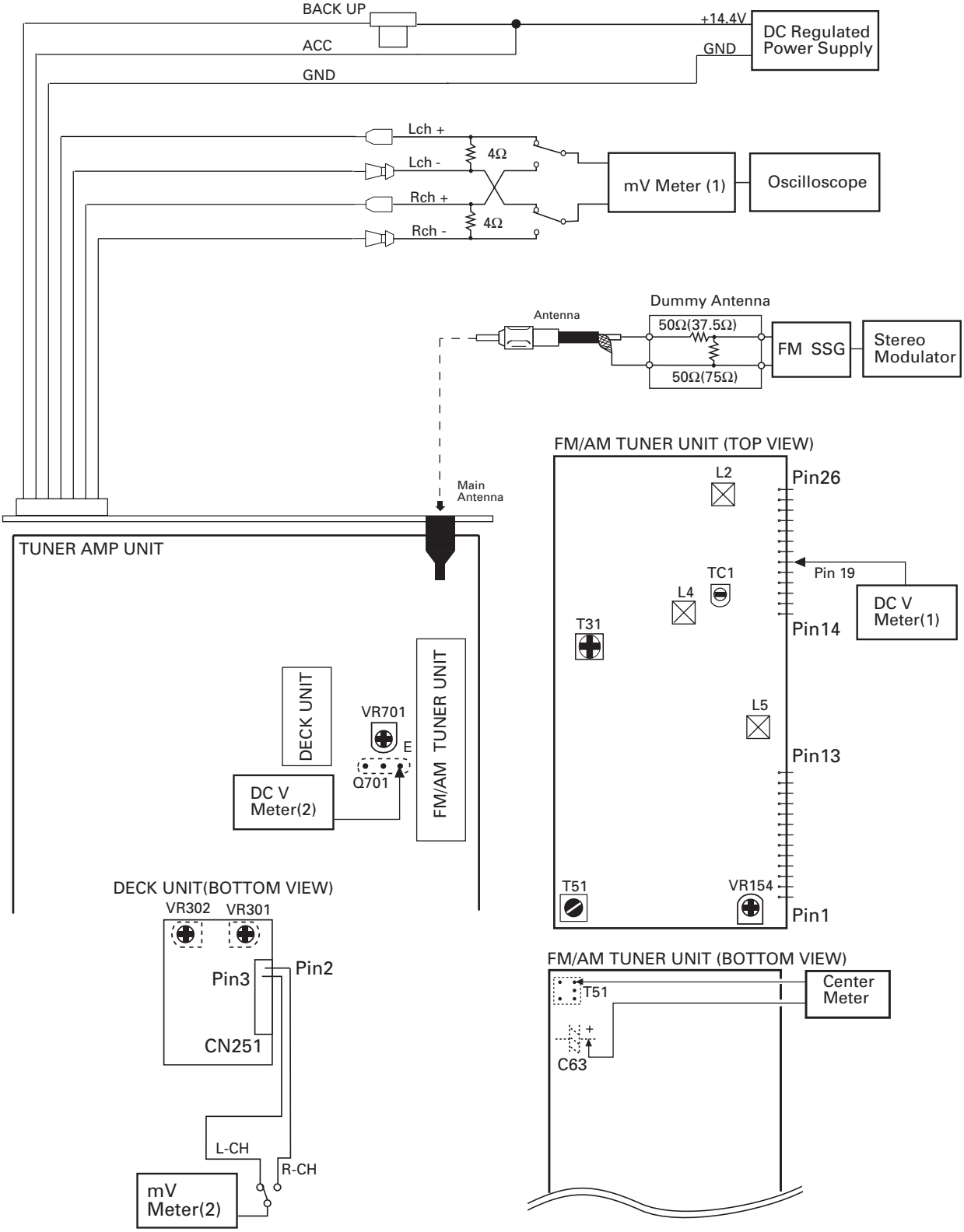


Fig. 20

www.manualscenter.com

FM ADJUSTMENT

Modulation M:MONO MOD., 400Hz 30%(22.5kHz Dev.) or 400Hz 100%(75kHz Dev.)
S:STEREO MOD., 1kHz, L or R=30%(20.25kHz+7.5kHz Dev.)
S2:STEREO MOD., 400Hz, L or R=60%(40.50kHz+7.5kHz Dev.)

NOTE:Before proceeding to further adjustments after switching power ON, let the tuner run for ten minutes to allow the circuits to stabilize.

	No.	FM SSG		Displayed	Adjustment	Adjustment Method
		Frequency(MHz)	Level(dBf)	Frequency(MHz)	Point	(Switch Position)
TUN Volt	1	•••••	•••••	108.0	L5	DC V Meter(1) : 6V
IF	2	98.1 M	60	98.1	T51	Center Meter : 0
ANT Coil	3	98.1 M	5	98.1	L2	mV Meter(1) : Maximum
RF Coil	4	98.1 M	5	98.1	L4	mV Meter(1) : Maximum
Image	5	129.3 M	60—80	107.9	TC1	mV Meter(1) : Minimum
IFT	6	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	7	98.1 S	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

RDS SL ADJUSTMENT

	No.	FM SSG		Displayed	Adjustment	Adjustment Method
		Frequency(MHz)	Level(dBf)	Frequency(MHz)	Point	(Switch Position)
	1	104.0 S2	35	104.0	VR701	DC V Meter(2) : 1.75V+0.05V,-0.35V

DOLBY B NR ADJUSTMENT

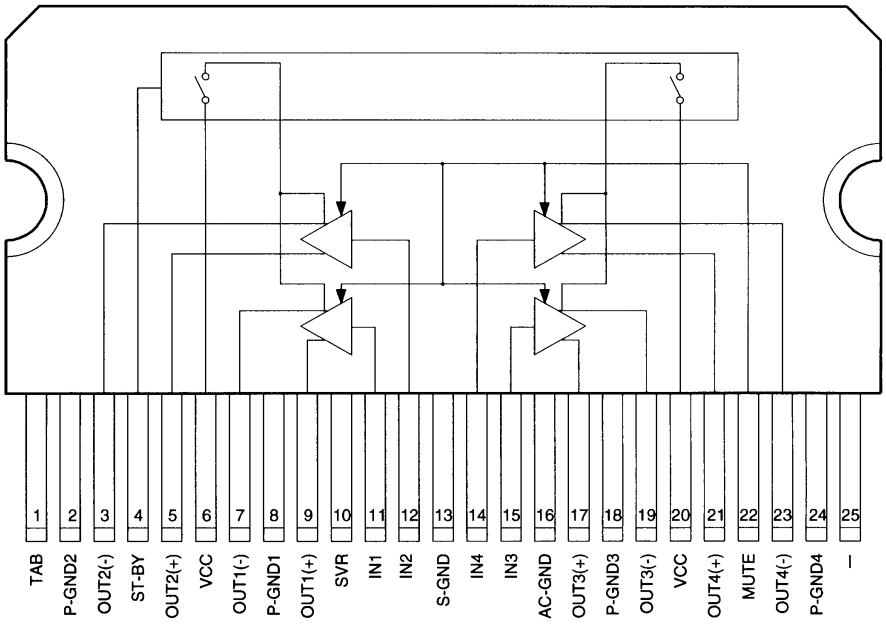
No.	Test Tape	Adjustment Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz,200nwb/m)	VR301(Lch),VR302(Rch)	mV Meter(2) : –6dBs±1.0dB (DOLBY NR Switch : OFF)

7. GENERAL INFORMATION

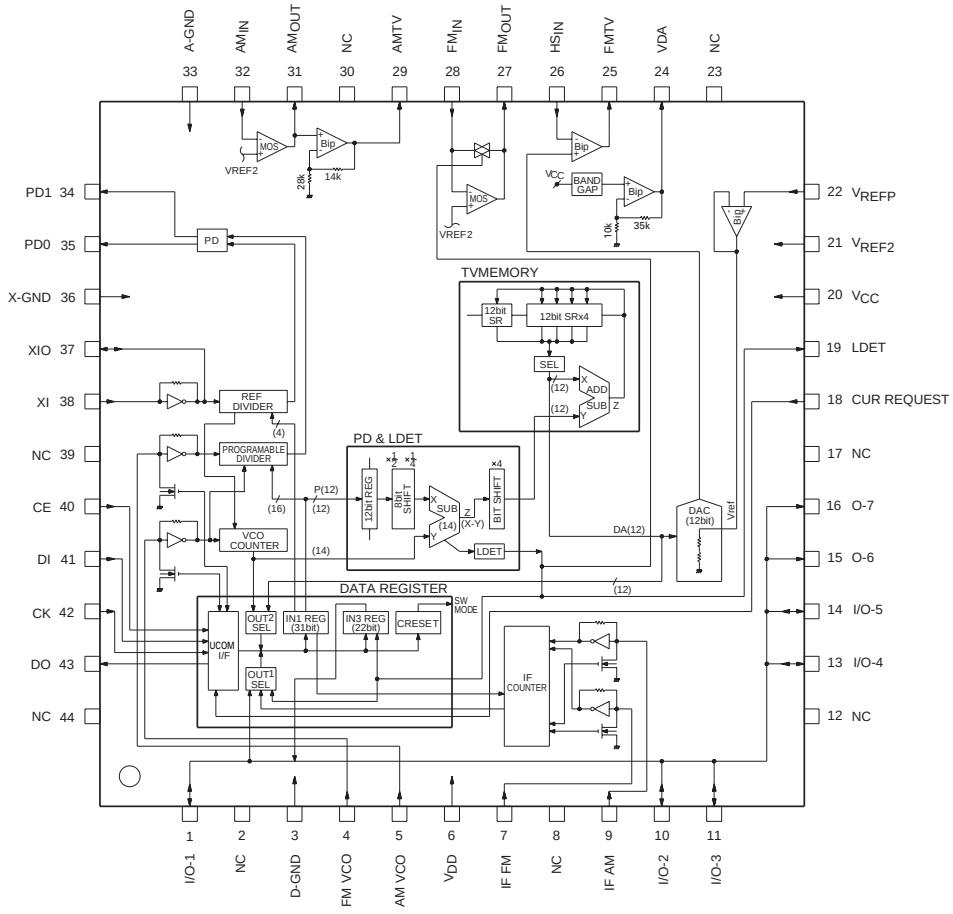
7.1 PARTS

7.1.1 IC

TDA7384

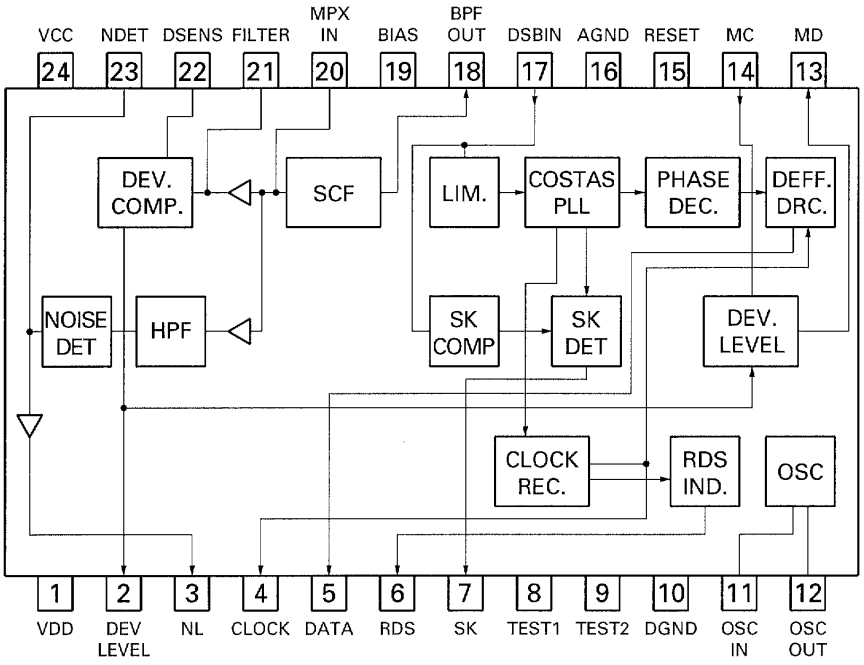


PM2007A

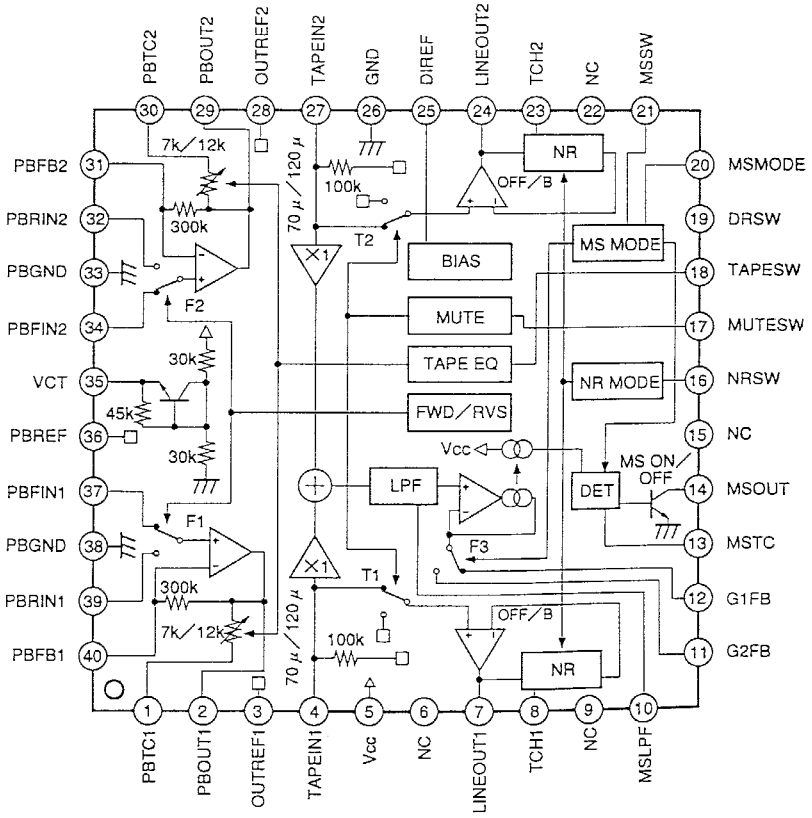


www.manualscenter.com

PM4006B



CXA2560Q



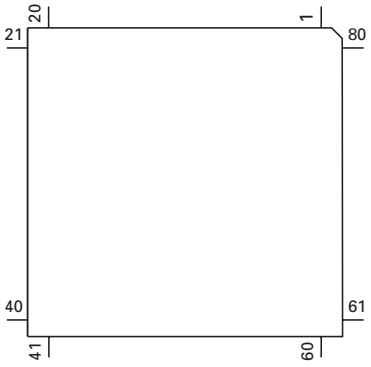
● **Pin Functions (PD4914A)**

Pin No.	Pin Name	I/O	Format	Function and Operation
1	ASENBO	O	C	Slave power supply control output
2	NC			Not used
3	ADPW	O	C	A/D converter power
4	AVSS			A/D GND
5	FIEOUT	O	C	FIE ON/OFF control output
6	$\overline{ST}$	I		FM stereo input
7	AVREF1			(Connect to VDD)
8	KYDT	I		Key data input
9	DPDT	O	C	Display data output
10	$\overline{SWVDD}$	O	C	Key board unit power supply control output
11	TUNPD1	I		PLL IC data input
12	TUNPD0	O	C	PLL IC data output
13	TUNPCK	O	C	PLL IC clock
14	TUNPCE	O	C	PLL IC chip enable
15	$\overline{CURRRQ}$	O	C	Tuner voltage FIX output
16–19	NC			Not used
20	DRELAY			Not used
21	EORR			Not used
22	EVST	O	C	Electric volume strobe output
23	EVCK	O	C	Electric volume serial clock output
24	EVDT	O	C	Electric volume serial data output
25	LCDPW			Not used
26	DRSYS	O	C	Door system select output
27	DRSENS	I		Door open/close sense input
28	ILPW	O	C	Illumination power
29	FM	O	C	FM power control output
30	AM	O	C	AM power control output
31	NR	O	C	NR output
32	CM	O	C	Cassette mechanism capstan motor control output
33	VSS			GND
34	SC2	O	C	Cassette mechanism sub motor control output
35	SC1	O	C	Cassette mechanism sub motor control output
36	MS	I		Cassette mechanism MS sense input
37	NC			Not used
38	$\overline{MTL}$	I		Cassette mechanism tape select input
39	$\overline{DLED}$	O	N	Alarm LED output
40	$\overline{N}$/R	O	C	Normal reverse output
41	PLAY	O	C	Tape MS filter select output
42	$\overline{LOADSW}$	I		Tape loading input
43	POS	I		Cassette mechanism position sense input
44	RES	I		Cassette mechanism reverse end sense input
45	PEE	O	C	Beep tone output
46	NES	I		Cassette mechanism forward end sense input
47	RDS57K	I		57kHzBP-OUT sense input
48	STBY	O		Stand-by output
49	SK	I		SK signal input
50	$\overline{DRST}$	O	C	Reset output
51	$\overline{TMUTE}$	O	C	Tuner mute output
52	$\overline{MDSENS}$	I		Modulation detect input
53	SD	I		SD input
54	$\overline{MUTE}$	O	C	System mute output
55	SYSPW	O	C	System power supply control output
56	TX	O	C	IP BUS data output
57	RX	I		IP BUS data input
58	RDSLK	I		RDS LK signal input
59	RDT	I		RDS demodulation data input
60	$\overline{RESET}$	I		Reset input

www.manualscenter.com

Pin No.	Pin Name	I/O	Format	Function and Operation
61	$\overline{\text{LDET}}$	I		PLL lock sense input
62	$\overline{\text{RCK}}$	I		RDS demodulation clock input
63	$\overline{\text{DSENS}}$	I		Grille detach sense
64	$\overline{\text{ISENS}}$			Not used
65	$\overline{\text{ASENS}}$	I		ACC power sense input
66	$\overline{\text{BSENS}}$	I		Back up power sense input
67	CLKIN	I		Clock input
68	VDD			Power supply
69	X2			Oscillator output
70	X1			Oscillator input
71	IC			GND
72	NC			Not used
73	TESTIN	I		Test program mode input
74	AVDD	I		A/D converter analogue power
75	AVREF0	I		A/D converter standard voltage input
76	SL	I		Signal level input
77	CL	I		Synchronizing signal input of display data latch
78	NL	I		Noise level input
79	NC			Not used
80	ALMUTE	O	C	Mute output for Detach alram

*PD4914A



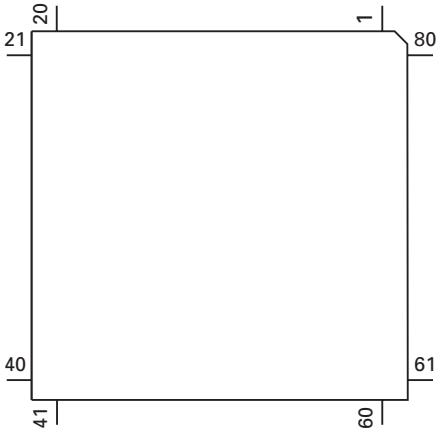
IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

Format	Meaning
C	C MOS
N	N Channel open drain

● **Pin Functions(PD6246A)**

Pin No.	Pin Name	I/O	Function and Operation
1	VSS		GND
2	X1		Crystal oscillator connection pin
3	X0		Crystal oscillator connection pin
4	$\overline{\text{RST}}$	I	System reset
5,6	MODE1,0		GND
7	$\overline{\text{DIM}}$	O	Dimmer select output
8	SO	O	UART output
9	SI	I	UART input
10	REMIN	I	Remote control reception
11	RVER		Not used
12	NC		Not used
13–16	KDT4–1	I	Key data input
17–22	KST6–1	O	Key strobe output
23	VCC		5V
24–73	SEG49–0	O	LCD segment output
74–77	COM3–0	O	Common driver output
78–80	V3–1		LCD bias power supply

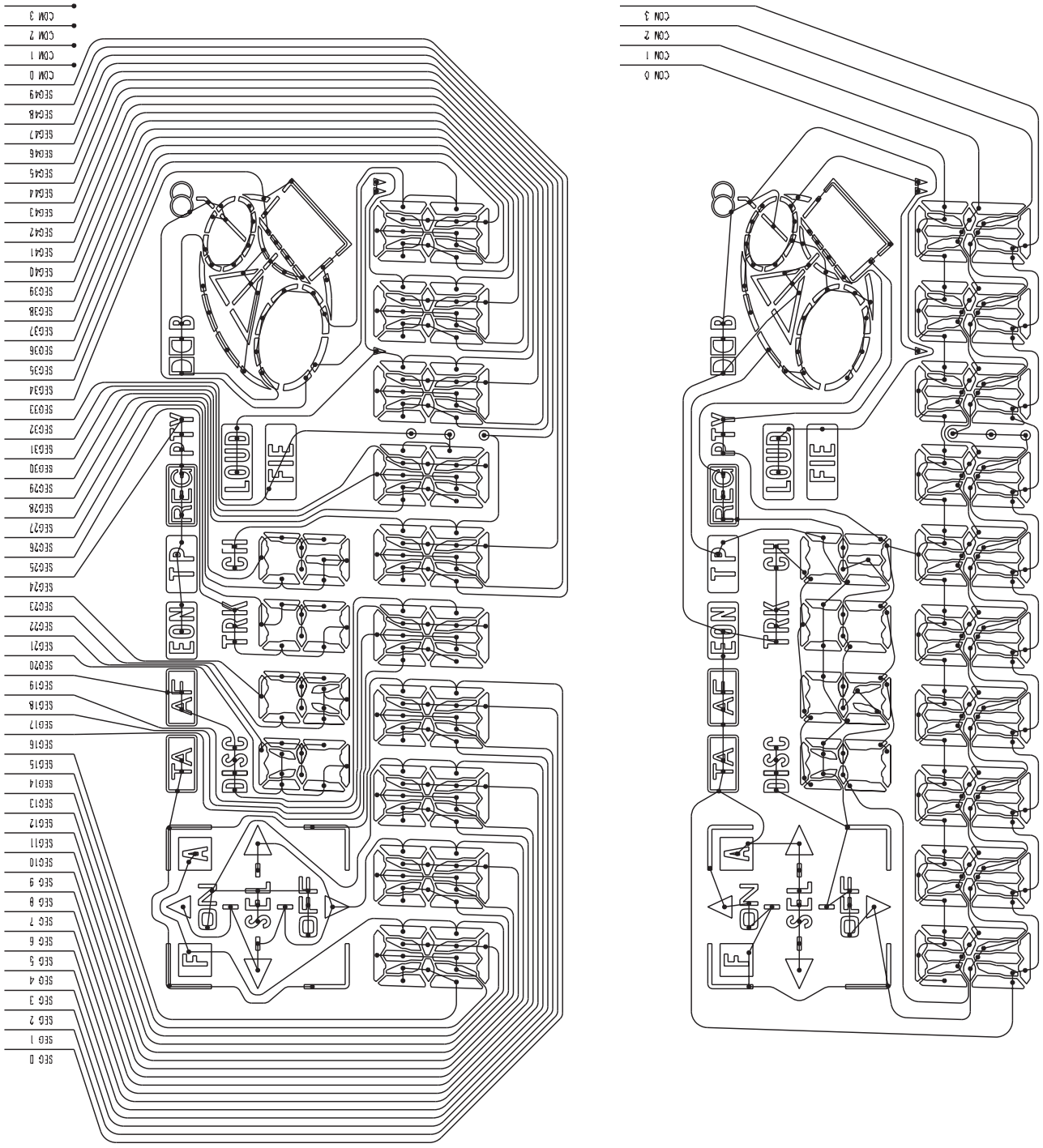
*PD6246A



www.manualscenter.com

7.1.2 DISPLAY

- **CAW1457(KEH-P5700R/X1M/EW)**
- **CAW1478(KEH-P5730R/X1M/EW))**



SEGMENT

COMMON

Fig. 21

7.2 DISASSEMBLY

● **Removing the Case(not shown)**

1. Remove the three screws.
2. Remove the Case.

● **Removing the Cassette Mechanism Module (not shown)**

1. Remove the four screws.
2. Disconnect the connector, and then removing the Cassette Mechanism Module.

● **Removing the Detach Grille Assy(Fig.22)**

1. Push the detach button.
2. Remove the Detach Grille Assy.

● **Removing the Panel Unit(Fig.22)**

1. Disengage the stopper at four locations indicated by white-arrows and then remove the Panel.
2. Disengage the stopper at two locations indicated by black-arrows.
3. Remove the Panel Unit.

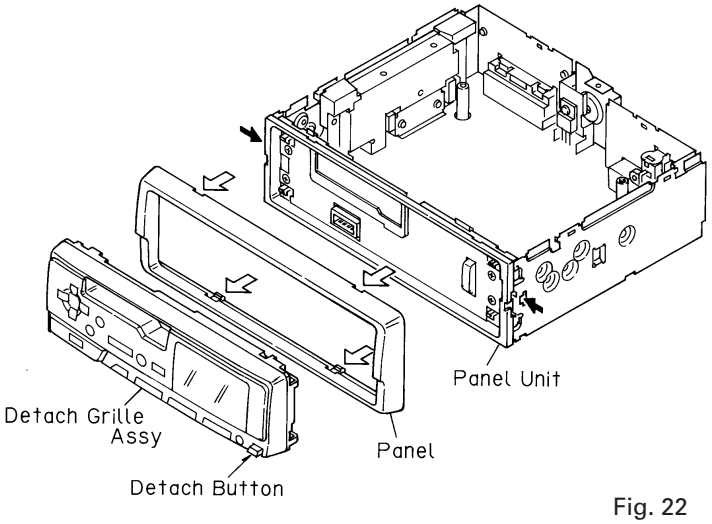


Fig. 22

● **Removing the Tuner Amp Unit(Fig.23)**

1. Removing the two screws A, three screws B and screw C.
2. Unbend the tabs at four locations indicated by arrow until straight.
3. Remove the Tuner Amp Unit.

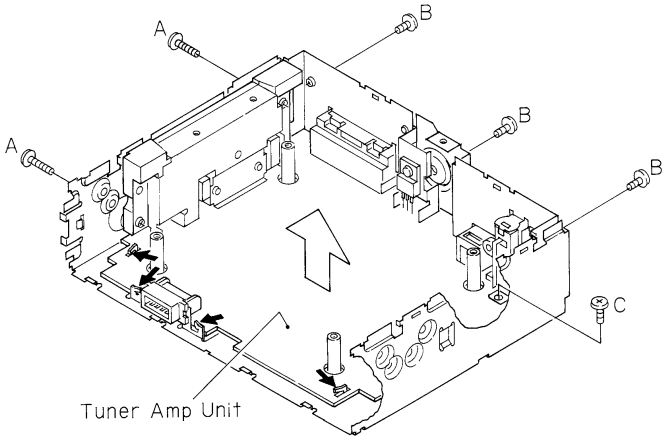


Fig. 23

www.manualscenter.com

7.3 BLOCK DIAGRAM

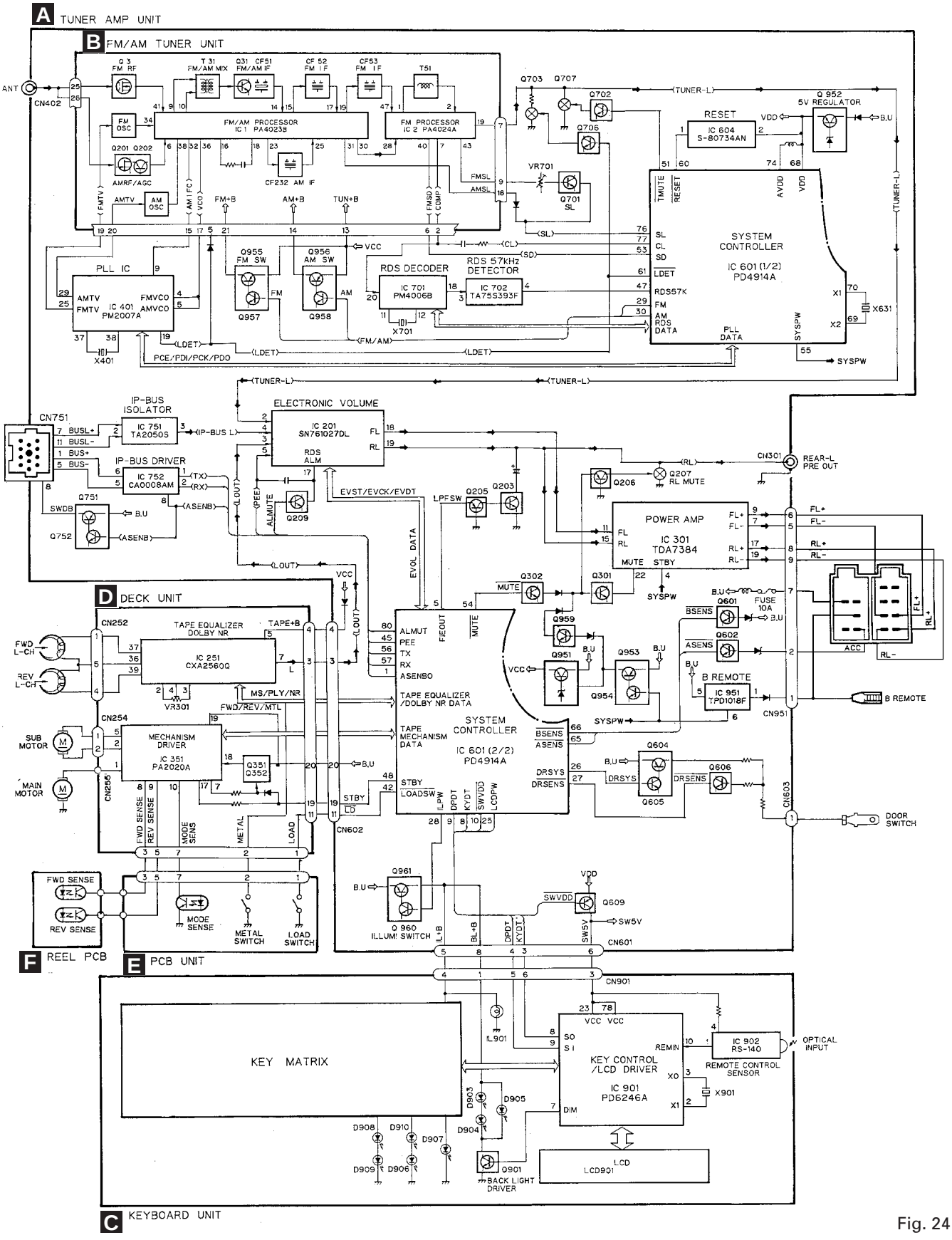


Fig. 24

8. OPERATIONS AND SPECIFICATIONS

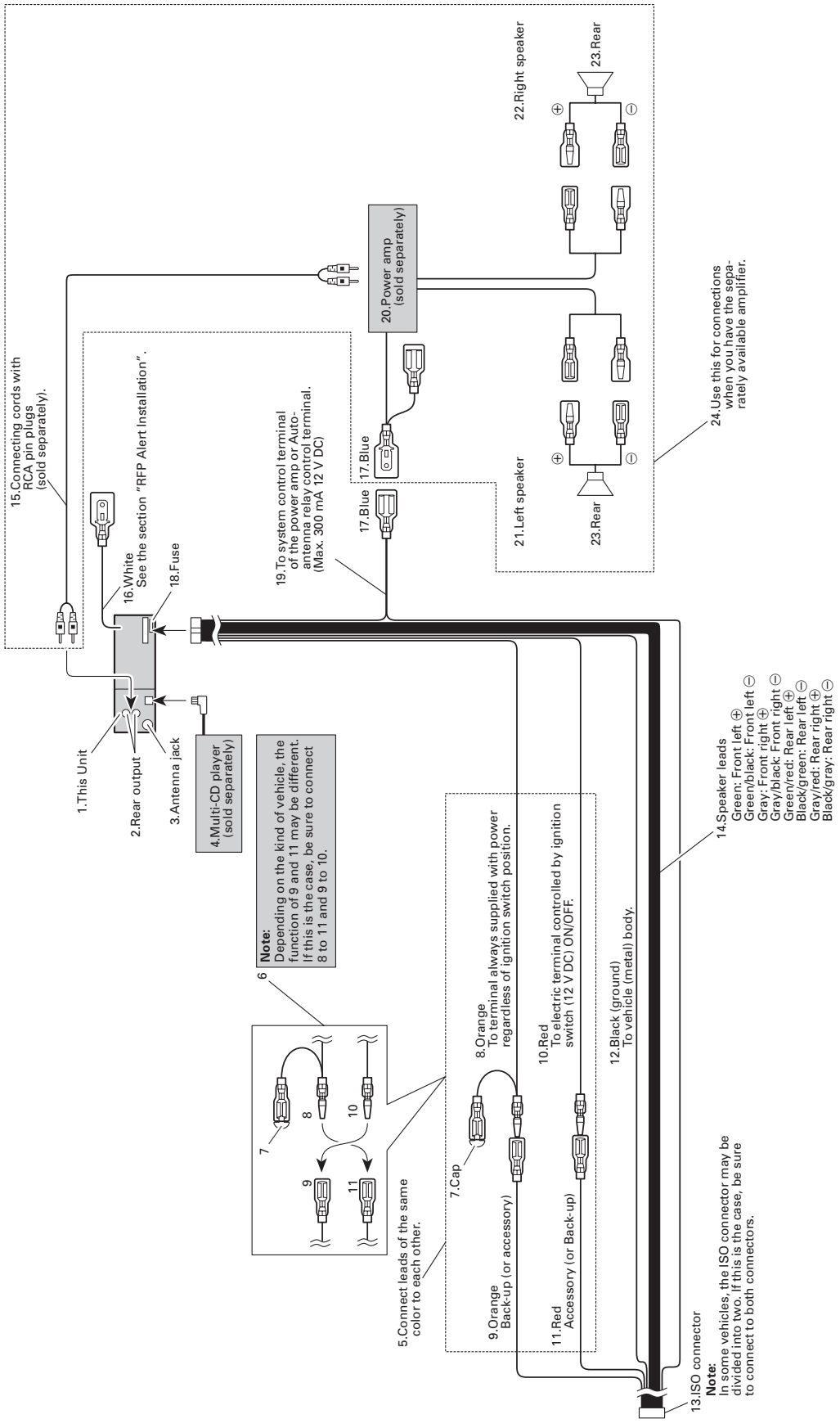
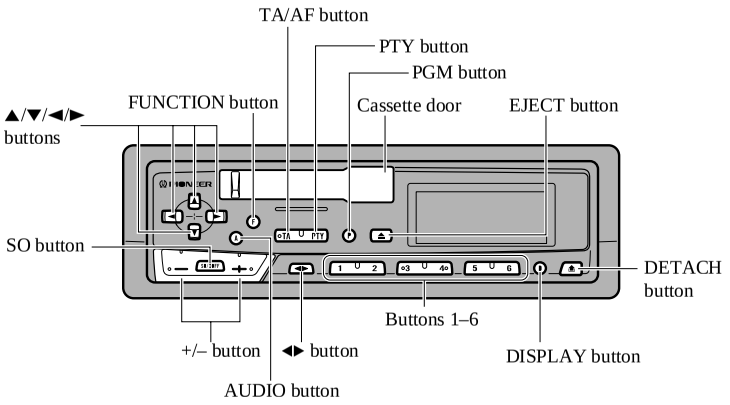

1.This Unit
2.Rear output
3.Antenna jack
4.Multi-CD player (sold separately)
5.Connect leads of the same color to each other.
6
7
8
9
10
11
7.Cap
8.Orange
To terminal always supplied with power regardless of ignition switch position.
9.Orange
Back-up (or accessory)
10.Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
11.Red
Accessory (or Back-up)
12.Black (ground)
To vehicle (metal) body.
13.ISO connector
Note:
In some vehicles, the ISO connector may be divided into two. If this is the case, be sure to connect to both connectors.
14.Speaker leads
Green: Front left ⊕
Green/black: Front left ⊖
Gray: Front right ⊕
Gray/black: Front right ⊖
Green/red: Rear left ⊕
Black/green: Rear left ⊖
Gray/red: Rear right ⊕
Black/gray: Rear right ⊖
15.Connecting cords with RCA pin plugs (sold separately).
16.White
See the section "RFP Alert Installation".
17.Blue
17.Blue
18.Fuse
19.To system control terminal of the power amp or Auto-antenna relay control terminal. (Max. 300 mA 12 V DC)
20.Power amp (sold separately)
21.Left speaker
22.Right speaker
23.Rear
23.Rear
24.Use this for connections when you have the separately available amplifier.
Note:
Depending on the kind of vehicle, the function of 9 and 11 may be different. If this is the case, be sure to connect 8 to 11 and 9 to 10.

Fig. 25

Key Finder

Head Unit



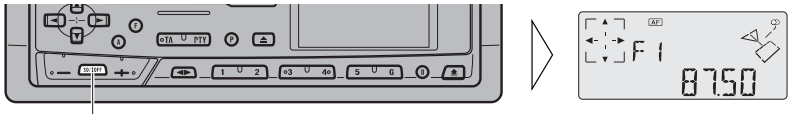
Basic Operation

To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:
- Loading a cassette in this product.

1. Select the desired source (e.g. Tuner).



Each press changes the Source ...

■ Head Unit

Each press of the SO button selects the desired source in the following order:
Tuner ➞ Tape ➞ Multi-CD player ➞ AUX

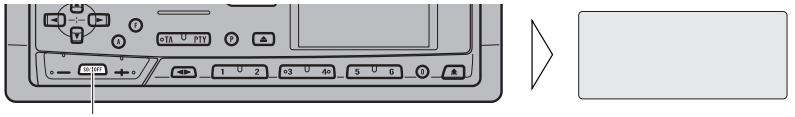
■ Remote Controller

Each press of the button selects the desired source in the following order:
TUNER button : Tuner ➞ OFF
TAPE button : Tape ➞ OFF
CD button : Multi-CD player ➞ OFF

Note:
- In the following cases, the sound source will not change:
  - * No Multi-CD player is connected to this product.
  - * No cassette tape is set in this product.
  - * No magazine is set in the Multi-CD player.
  - * AUX (external input) is set to OFF.

2. Raise or lower the volume.

3. Turn the source OFF.



Hold for 1 second or more

www.manualscenter.com

Basic Operation of Tuner

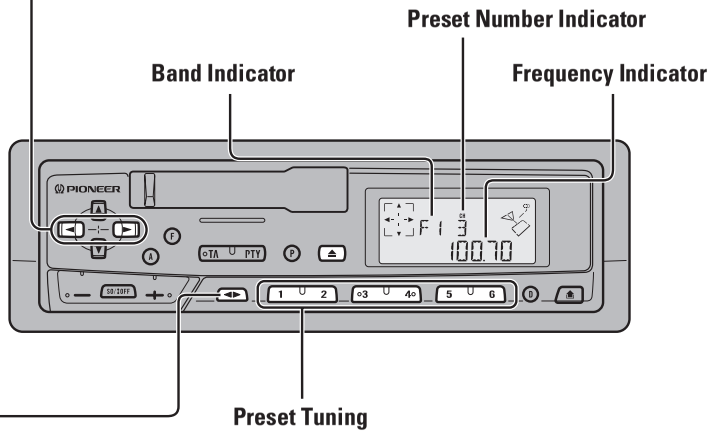
This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations.

Manual and Seek Tuning

- **You can select the tuning method by changing the length of time you press the ◄/► button.**

Manual Tuning (step by step)	0.3 seconds or less
Seek Tuning (automatically)	0.3 – 2 seconds
Manual Tuning (continuously)	2 seconds or more

Note:
- "◯" stereo indicator lights when a stereo station is selected.



- **You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.**

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:
- Up to 18 FM stations (6 in F1 (FM1), F2 (FM2) and F3 (FM3)) and 6 MW/LW stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

Basic Operation of Cassette Player

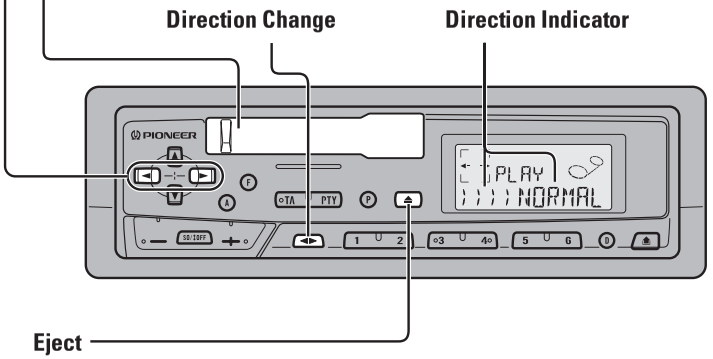
Fast Forward/Rewind and Music Search

- **Each press of the ◄ button selects Rewind or Rewind-Music Search.**
  REW (Rewind) → R-MS (Rewind-Music Search) → Normal Playback
- **Each press of the ► button selects Fast forward or Forward-Music Search.**
  FF (Fast forward) → F-MS (Forward-Music Search) → Normal Playback

Note:
- Fast forward/Rewind and Music Search can be canceled by pressing the ◄► button.

Cassette Loading Slot

Note:
- "METAL" appears on the display for 2 seconds when a metal or chrome tape is inserted. Nothing is displayed for a normal tape.



Note:
- The Tape function can be turned ON/OFF with the cassette tape remaining in this product.

Basic Operation of Multi-CD Player

This product can control one or more multi-CD players. (There are some types of Multi-CD players such as “CDX-P630S” which you cannot connect more than one.)

Switching the Multi-CD Player

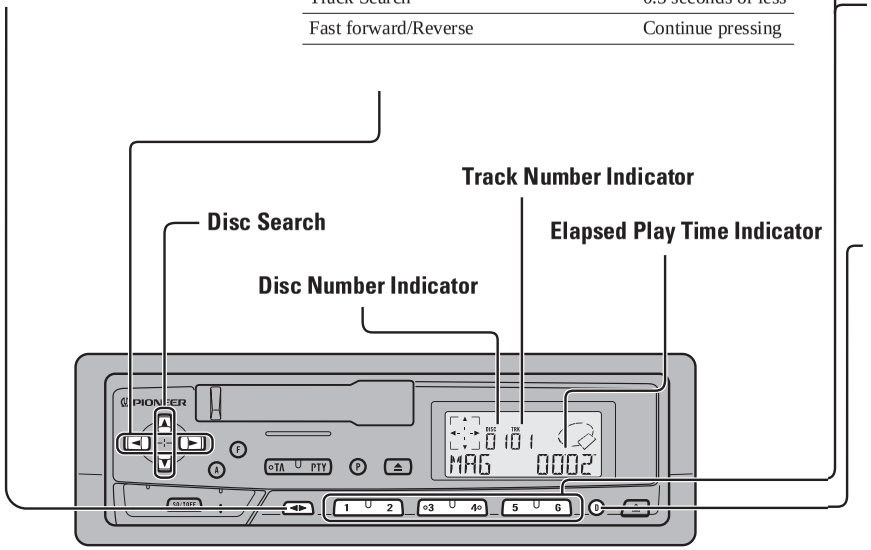
Using a multiple connection adapter lets you connect up to three Multi-CD players.

M-CD 1 → M-CD 2→ M-CD 3
(Displayed for about 2 seconds.)

Track Search and Fast Forward/Reverse

- **You can select between Track Search or Fast forward/Reverse by pressing the ◄/► button for a different length of time.**

Track Search	0.5 seconds or less
Fast forward/Reverse	Continue pressing



Disc Number Search (for 6-Disc, 12-Disc types)

- **You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.**

Note:
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds or longer.

Disc Number Rough Search (for 50-Disc type only)

This handy function lets you select discs loaded in a 50-Disc Multi-CD Player using the 1 to 5 buttons. The 50 discs are divided into five blocks, with each of the 1 to 5 buttons assigned to a block.

- **Select the desired block with the 1 to 5 button.**

Note:
- After completing a rough search, use the ▲ and ▼ buttons to select a desired disc.

Displaying Disc Titles

- **Press the DISPLAY button, to change the Disc Title display of the current disc.**

Note:
- If you switch displays when disc titles have not been input, “NO TITLE” is displayed for about 8 seconds.
- Repeat the preceding operation to return to the normal display.

Note:
- The multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. “READY” is displayed.
- When a magazine is loaded into a 50-Disc type Multi-CD Player, information on all the discs in the magazine is read.
  If you start playing a disc on a 50-Disc type Multi-CD Player before reading of information on all discs has been completed, reading of information stops part way through. This will prevent you from using a number of functions. (If you try and use these functions, “NOT READY” is displayed.)
  If this happens, reading of information begins again when you switch to a component other than the 50-Disc type Multi-CD Player.
- If the multi-CD player cannot operate properly, an error message such as “ERROR-14” is displayed. Refer to the multi-CD player owner’s manual.
- If there are no discs in the multi-CD player magazine, “NO DISC” is displayed.
- “LOAD” will be displayed in the following cases:
  * If the disc in the extra tray in selected.
  * If the disc in moved from the extra tray to the magazine.
  (Refer to the 50-Disc type multi-CD player owner’s manual.)

www.manualscenter.com

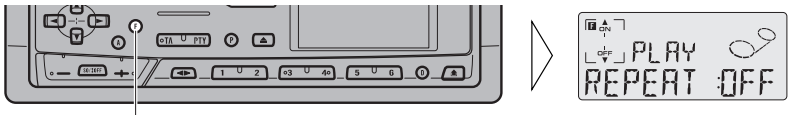
Basic Operation

Entering the Function Menu

The Function Menu lets you operate simple functions for each source.

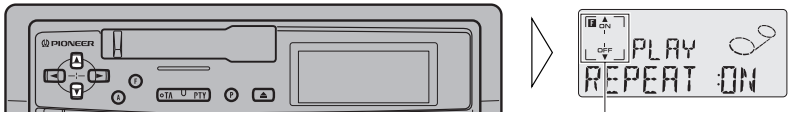
Note:
- After entering the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

1. Select the desired mode in the Function Menu.



Each press changes the Mode ...

2. Operate a mode. (e.g. Repeat Play)



The button used and the operation it performs are indicated by the key guidance indicator. Press the ▲ button to switch the key guidance indicator ON, and the ▼ button to switch it OFF.

3. Cancel the Function Menu.

www.manualscenter.com

8.2 SPECIFICATIONS

Specifications

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 8.5 A
Dimensions
(mounting size) ..... 178 (W) × 50 (H) × 153 (D) mm
(front face) ..... 188 (W) × 58 (H) × 19 (D) mm
Weight ..... 1.2 kg

Amplifier

Maximum power output ..... 35 W × 4
Continuous power output ..... 22 W × 4
(DIN45324, +B = 14.4 V)
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout output level/output impedance ..... 500 mV/1 kΩ
Tone controls
(Bass) ..... ±12 dB (100 Hz)
(Treble) ..... ±12 dB (10 kHz)
Loudness contour ..... +10 dB (100 Hz), +7 dB (10 kHz)
(volume: –30 dB)

Cassette player

Tape ..... Compact cassette tape (C-30 – C-90)
Tape speed ..... 4.76 cm/sec.(+0.14 cm/sec.,-0.05 cm/sec.)
Fast forward/rewinding time .... Approx. 100 sec. for C-60
Wow & flutter ..... 0.09% (WRMS)
Frequency response ..... Metal: 30 – 19,000 Hz (±3 dB)
Stereo separation ..... 45 dB
Signal-to-noise ratio
..... Metal: Dolby B NR IN: 67 dB (IEC-A network)
Dolby NR OUT: 61 dB (IEC-A network)

FM tuner

Frequency range ..... 87.5 – 108 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range ..... 531 – 1,602 kHz
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

LW tuner

Frequency range ..... 153 – 281 kHz
Usable sensitivity ..... 30 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

www.manualscenter.com

PIONEER
The Art of Entertainment

Service Manual

ORDER NO.
CRT1640

CASSETTE MECHANISM ASSY

CX-631

- **This service manual describes operation of the cassette mechanism incorporated in models listed in the table below.**
- **When performing repairs use this manual together with the specific manual for model under repair.**

Model	Service Manual	Cassette Mechanism Unit	Deck Unit
KEH-P990/UC	CRT1639	EXK3170	CWM3954
KEX-P820/ES	CRT1656		
KEX-P820RDS/EW	CRT1638		
KEH-P9200RDS/EW, X1BEW	CRT1638	EXK3130	CWM3953
KEH-P9250/ES	CRT1656		
KEH-P8200/UC	CRT1639		
KEH-P8200RDS/EW, X1BEW	CRT1638		
KEH-P8250/ES	CRT1656		
KEH-P790/UC	CRT1654	EXK3110	CWM3952
KEH-P7250/ES	CRT1652		
KEH-P7200RDS/EW	CRT1653		
KEH-P7200/UC	CRT1654		
KEH-P7100RDS/EW	CRT1653		
KEH-P6200/UC	CRT1652		
KEH-P6200RDS/EW	CRT1653	EXK3105	CWM4212
KEH-P6100RDS/EW	CRT1653		
KEH-P590/UC	CRT1652	EXK3100	CWM3951
KEH-P5250/ES	CRT1652		
KEH-P5200/UC	CRT1652		
KEH-P25RDS/EW	CRT1653		
KEH-P15RDS/EW	CRT1653		

CONTENTS

1. MECHANISM DESCRIPTION AND GREASING 2
2. DISASSEMBLY 11
3. ADJUSTMENT 11

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R OP2 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY.LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL:[03]580-9911

© PIONEER ELECTRONIC CORPORATION 1994

K-FFD.DEC. 1994 Printed in Japan

www.manualscenter.com

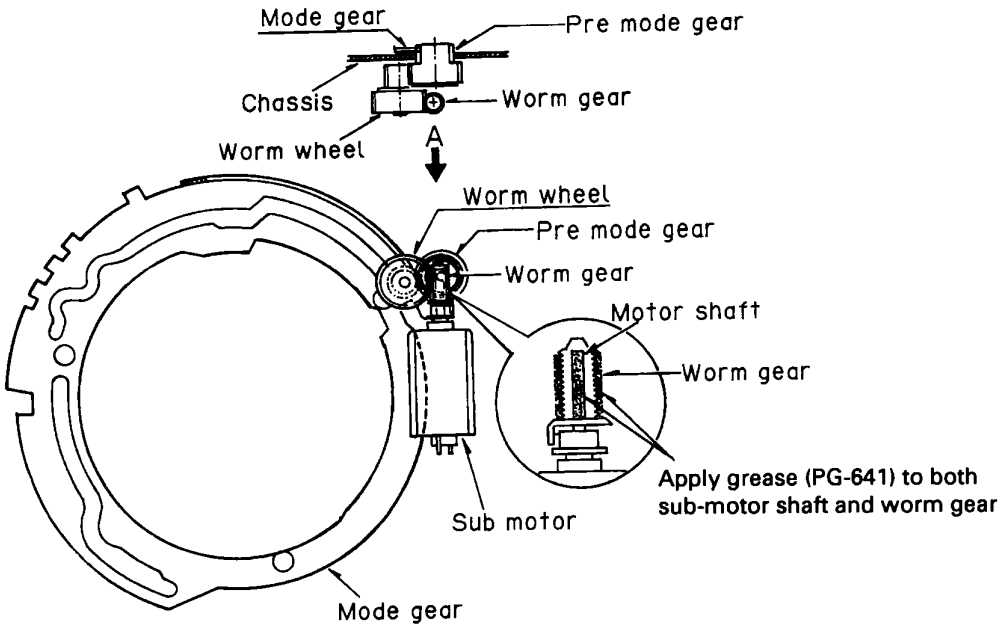
1. MECHANISM DESCRIPTION AND GREASING

1.1 DRIVE OPERATION

Inserting the cassette tape→Draw in→Put it down→Release←→Forward play←→REW←→FF←→Reverse play

Eject←Draw out←Lift←

All motive force(except the force for running a tape) is supplied by sub-motor.



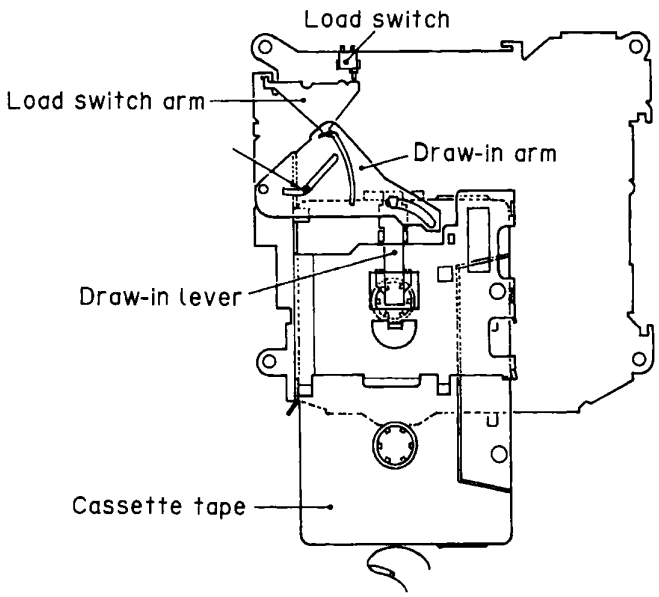


Fig.1

www.manualscenter.com

1.2 LOADING AND EJECT OPERATIONS

● Loading the Cassette Tape

1.Push the cassette tape by finger.
2.The draw-in lever is pushed by the cassette tape. And the load switch is turned on by way of the draw-in arm and of the load switch arm.
3.The sub-motor starts running.
4.The mode gear turns in direction (1).
5.The put-down driving lever moves in direction (2).
6.Move the put-down lever operation shaft in direction (3) and turn the draw-in arm in direction (4).
7.The cassette tape is loaded.

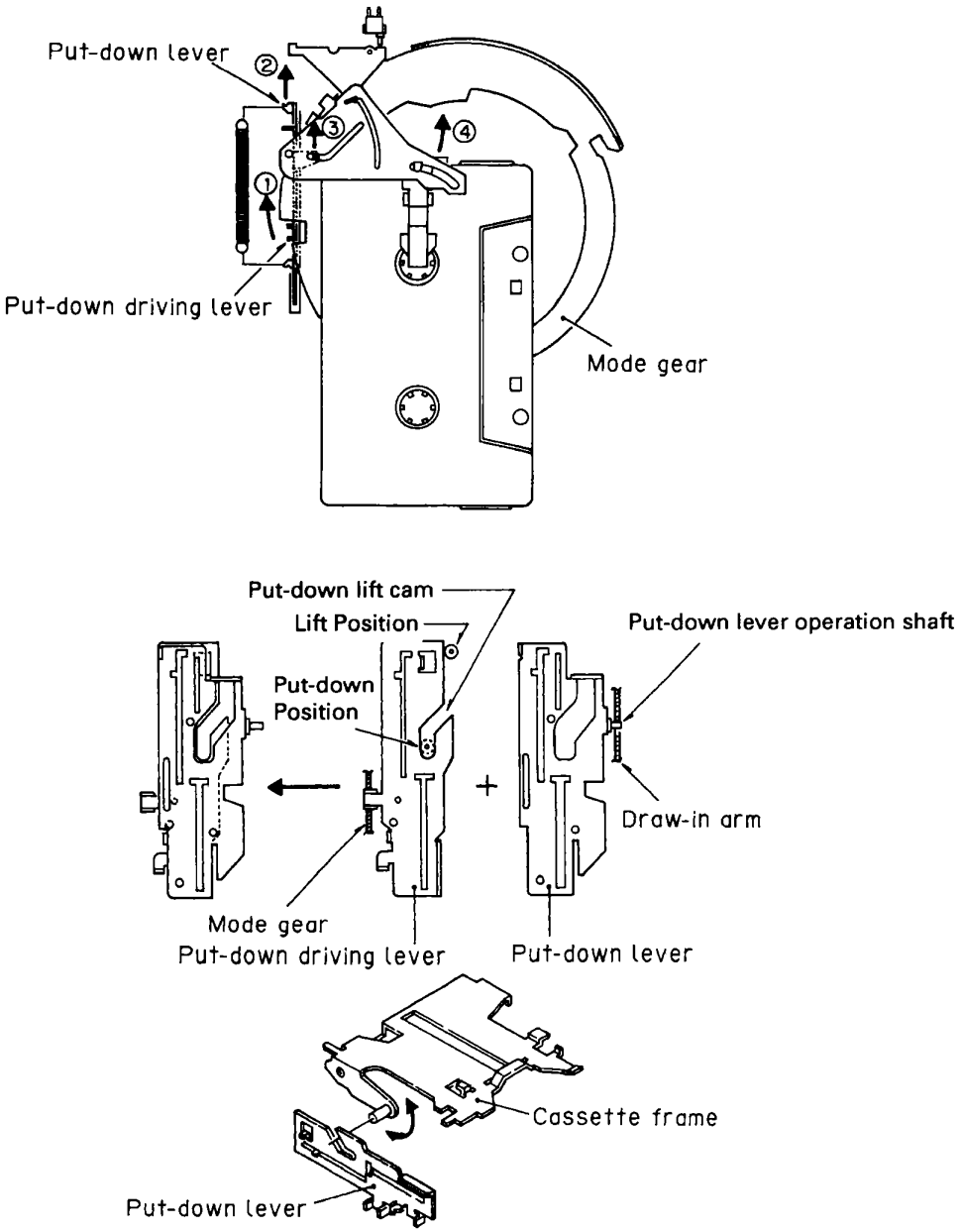


Fig.2

ClibPDF - www.fastio.com

● Ejecting the Cassette Tape

1.The sub-motor starts running in the direction opposite to that in loading.
2.The mode gear turns in direction (5).
3.The put-down driving lever moves in direction (6).
4.Move the put-down lever operation shaft in direction (7) and turn the draw-in arm in direction (8).
5.Pull the load switch arm toward you and turn off the load switch.
6.The sub-motor stops.
7.The cassette tape is ejected.

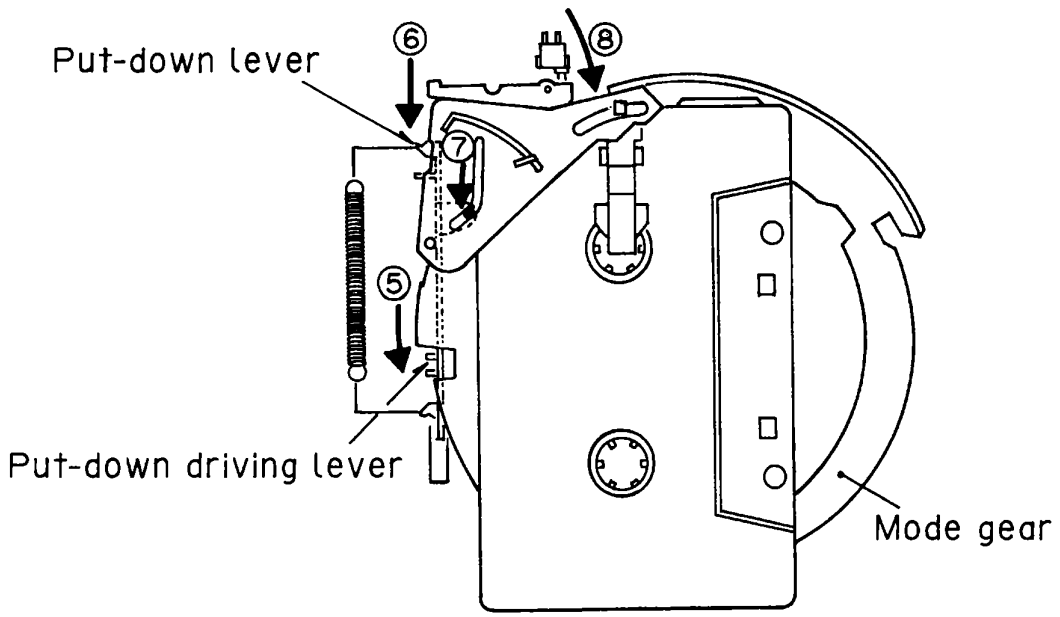


Fig.3

CLICK PDF www.freeusers.com
www.manualscenter.com

1.3 MODE CHANGEOVER

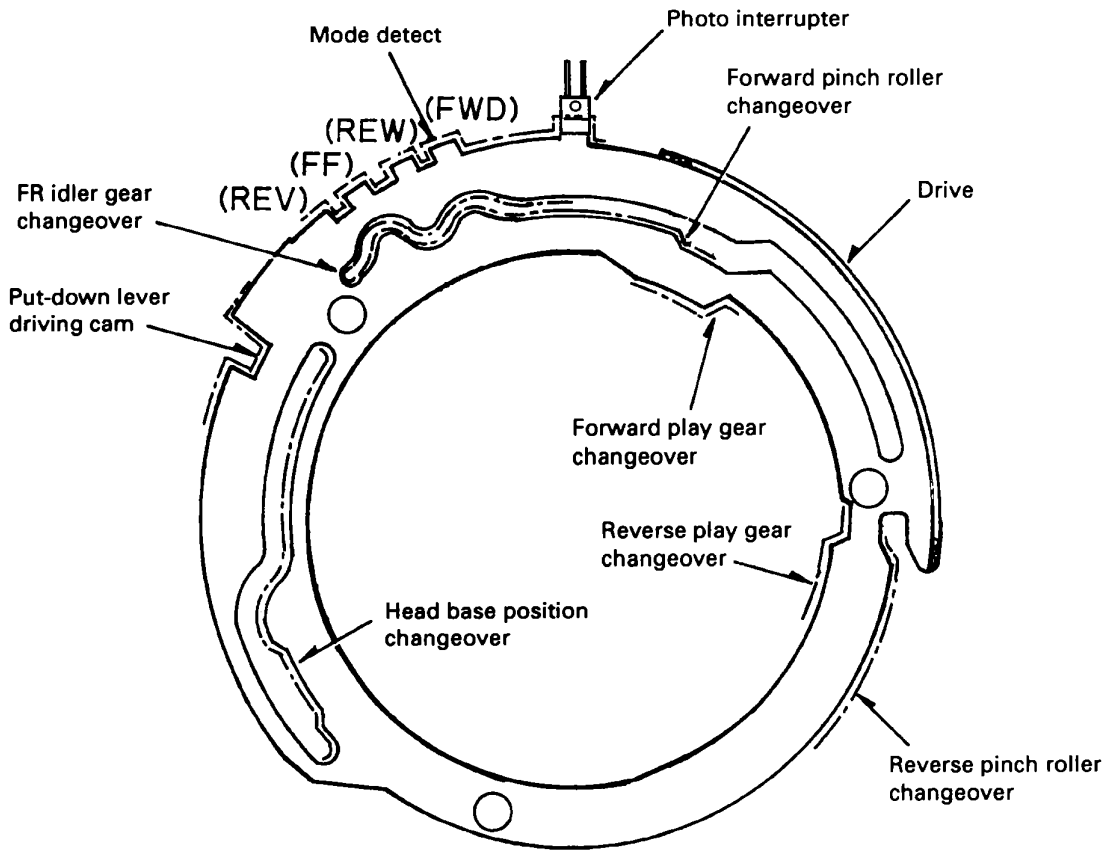


Fig.4

The mode gear is rotated by rotation of the pre mode gear which is driven by the sub-motor. The modes are in series in the order of "release"←→"forward play"←→"REW"←→"FF"←→"reverse play". The rotation of the mode gear makes changeover of the head position, press contact between the pinch rollers(forward, reverse), the rewinding reel rotation, etc.

The actions to be performed in the separate mode are show in Fig.5 through 9.

ClibPDF - www.fastio.com

● **Release**

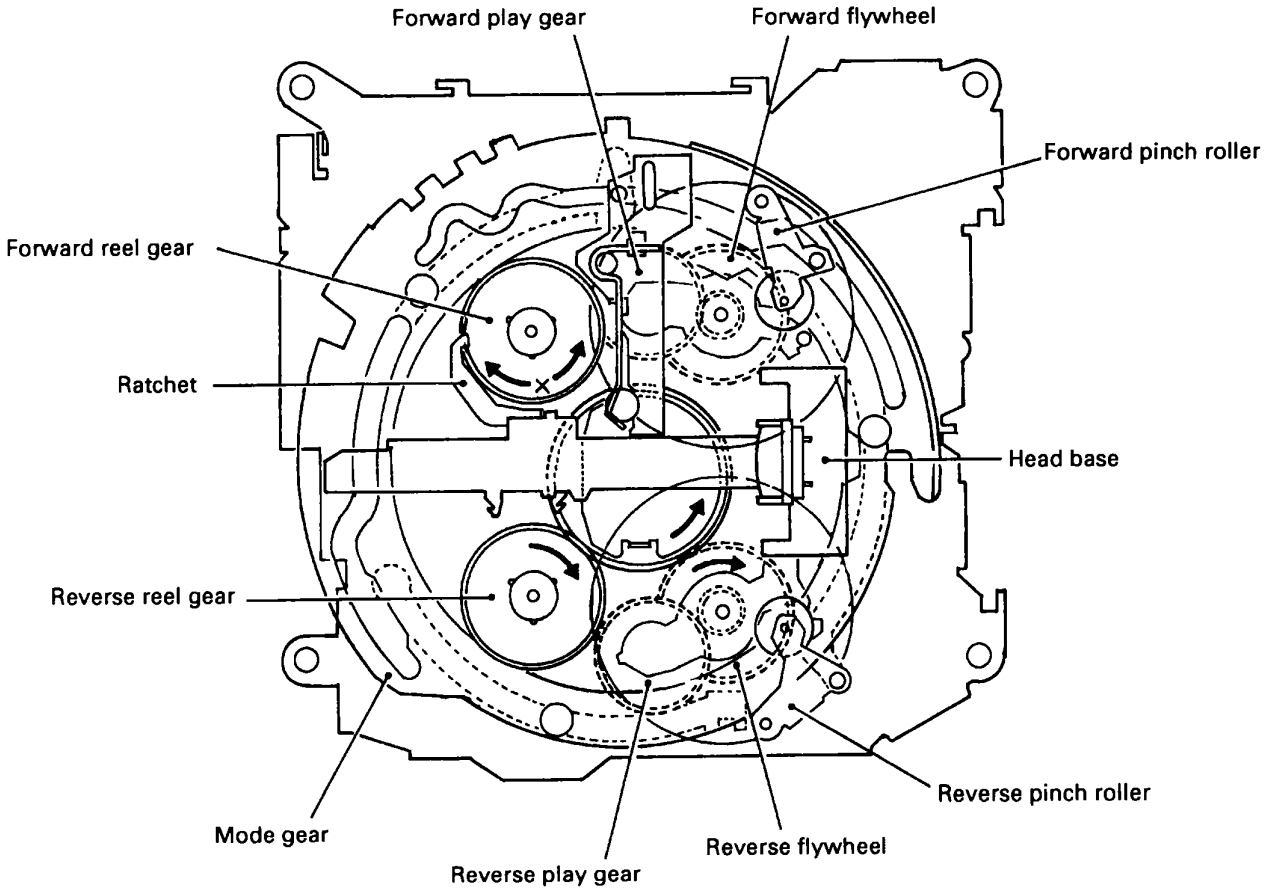


Fig.5

CLICK PDF www.manualsdirect.com
www.manualscenter.com

● **Forward Play**

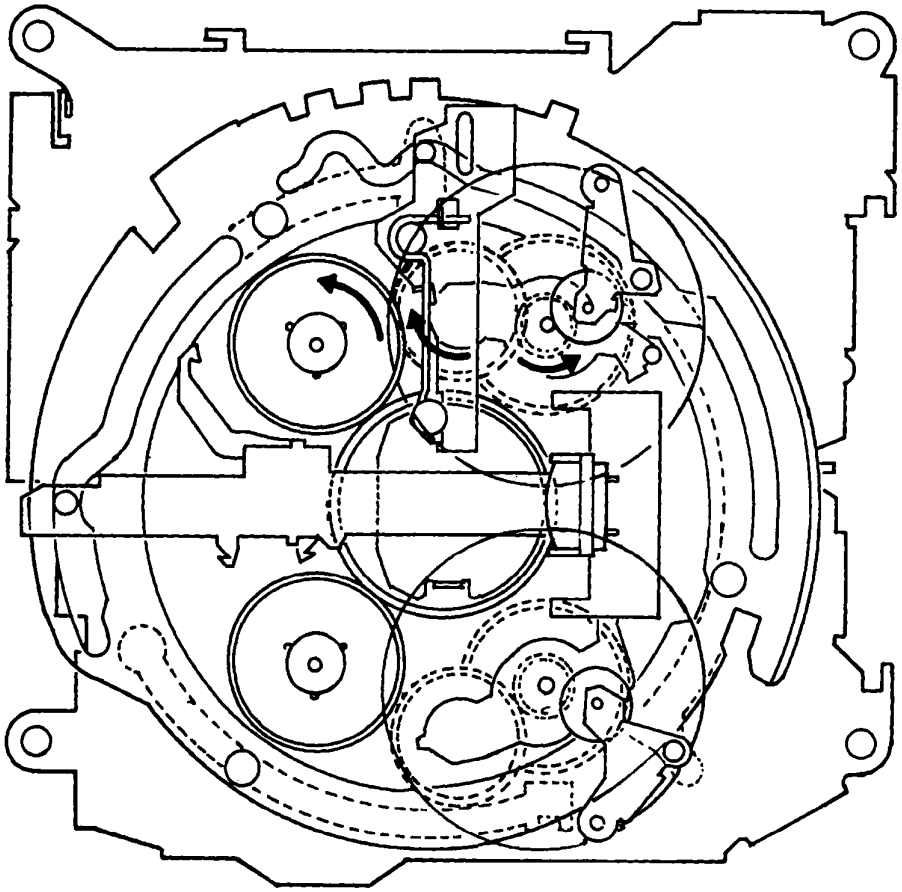


Fig.6

ClibPDF - www.fastio.com

● REW

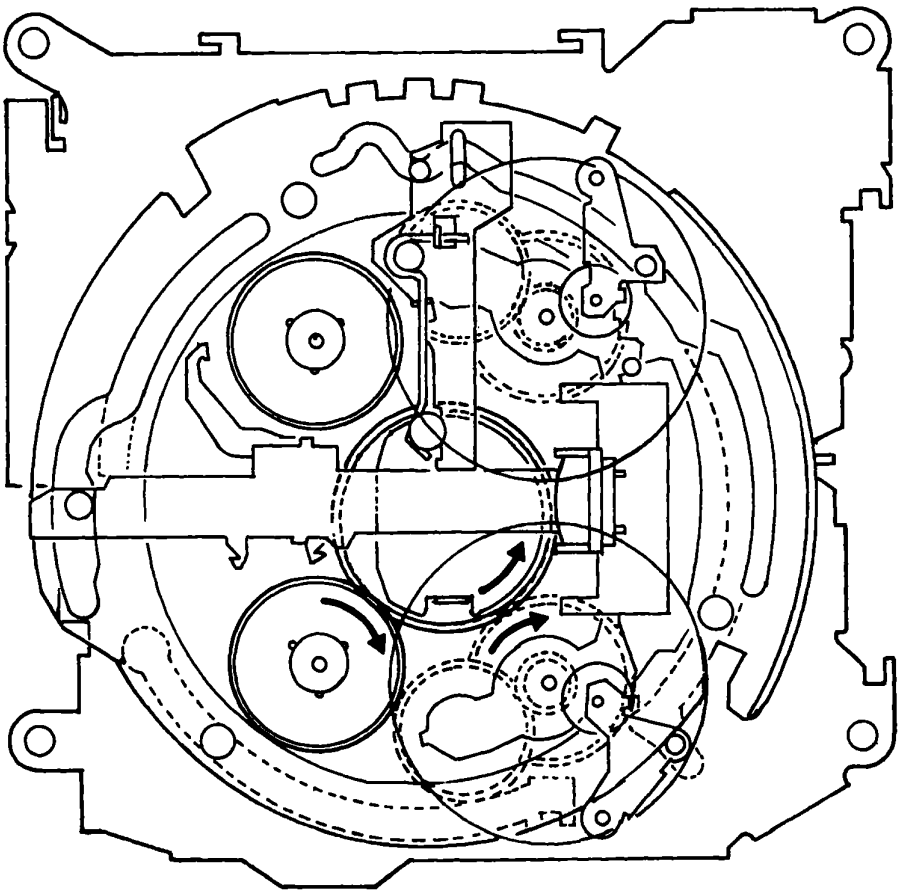


Fig.7

www.manualscenter.com

● FF

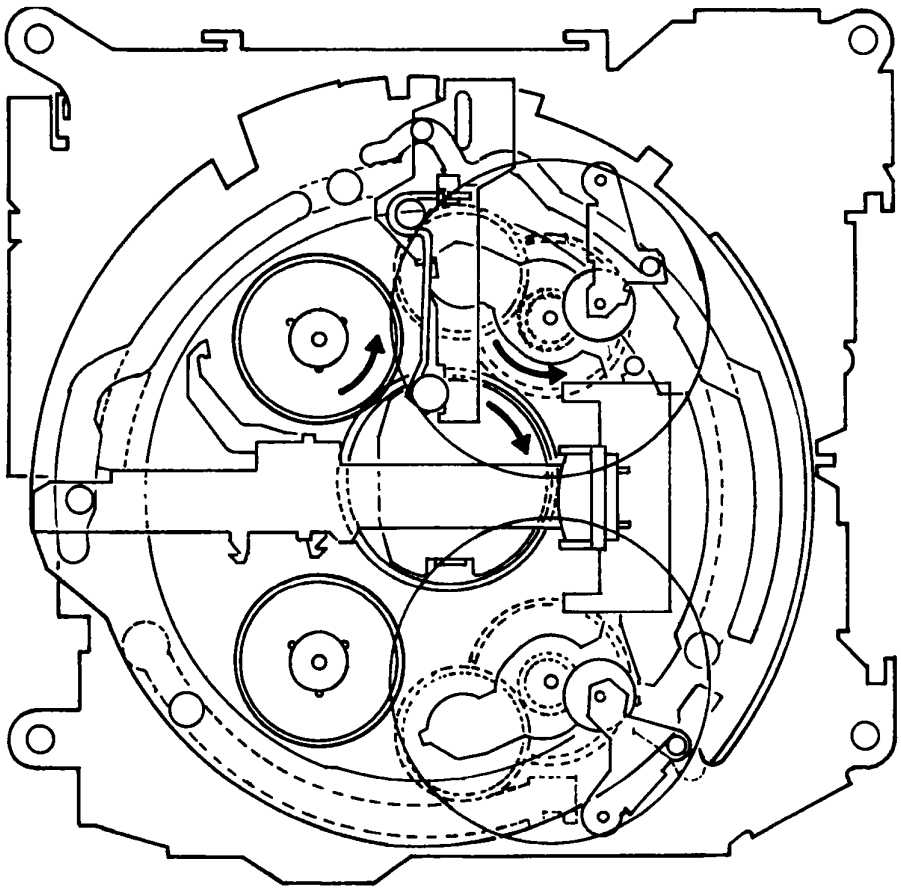


Fig.8

ClibPDF - www.fastio.com

● **Reverse Play**

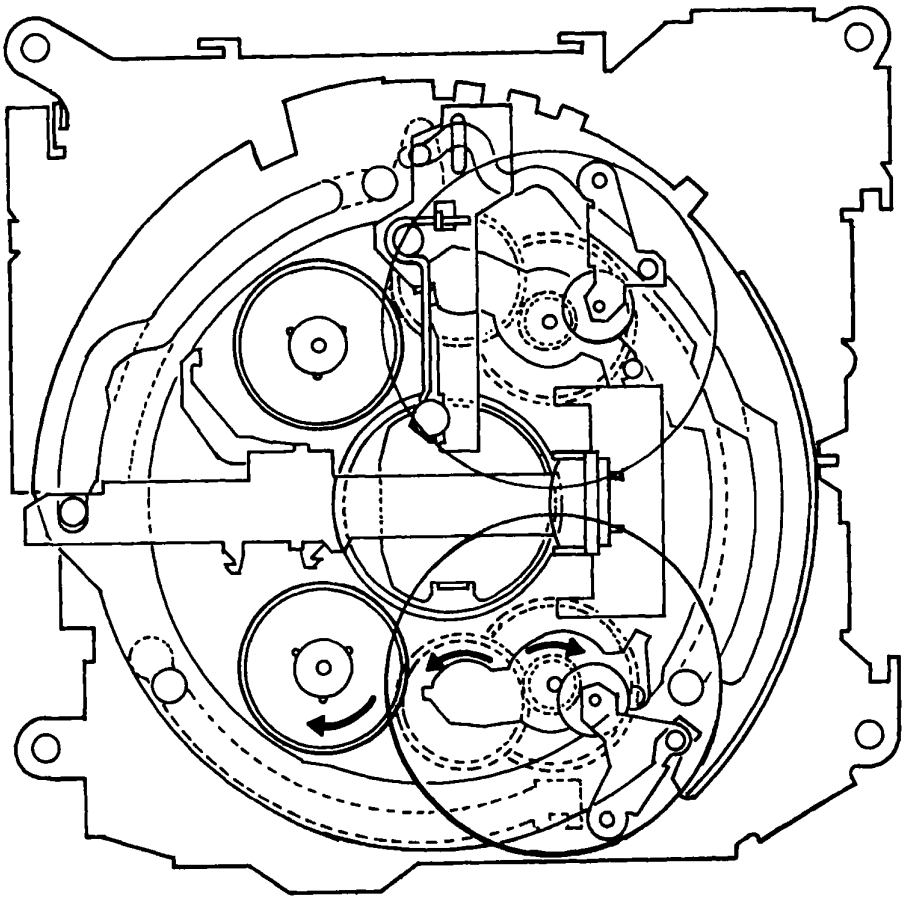


Fig.9

www.manualscenter.com

2. DISASSEMBLY

● How to Remove the Cassette Holder

1.Remove the washer and two arms.
2.Remove the two screws, and then remove the guide assy.
3.Straighten the frame unit pawl, and remove both holder and frame unit.

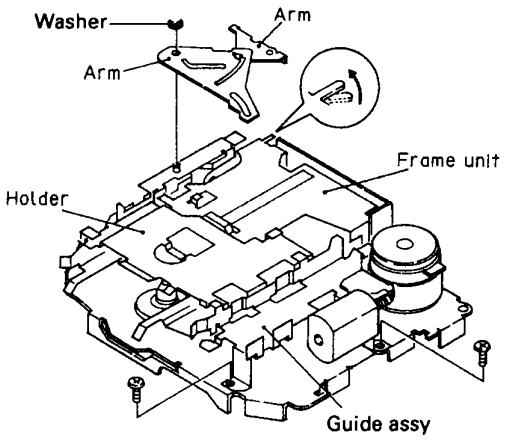


Fig.10

● How to Remove the Reel Unit

1.Remove the washer.
2.Push the arm in the arrow-marked direction and remove the reel assembly.

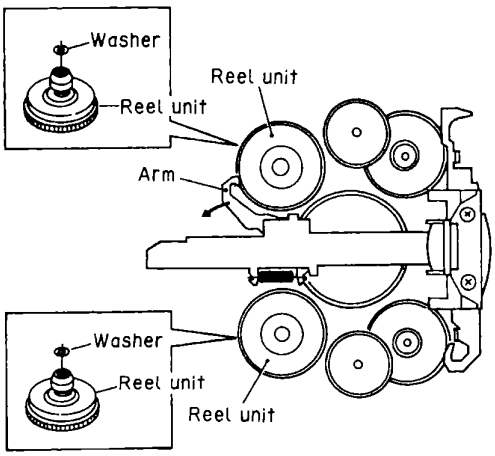


Fig.11

3. ADJUSTMENT

3.1 TAPE SPEED ADJUSTMENT

● To Adjust

Reproduce NCT-111 (3kHz, -10dB). Adjust the semi-fixed resistor so that frequency counter shows 3015Hz(+75Hz, –45Hz).

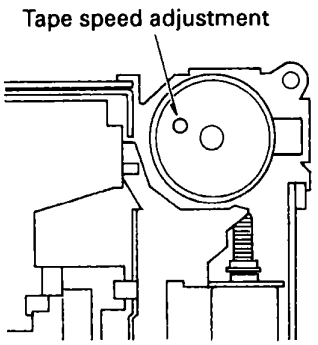


Fig.12

ClibPDF - www.fastio.com

3.2 CHECK POINTS OF CASSETTE MECHANISM

Confirm the following items when replacing parts of the cassette mechanism .	■ Tape speed deviation: 3,000Hz +90Hz, –30Hz (4.76cm/s +3%, –1%) Using an NCT-111, measure the speed at the start and end of winding and take the maximum values.If values indicated by the pointer vary considerably, adjust to 70% of the minimum and maximum values. Measuring time shall be 5–6 seconds.	■ Wow and flutter: Less than 0.15%(WRMS) Using the NCT-111, measure the wow and flutter at the start and end of winding and take the maximum value. If values indicated by the pointer very considerably, adjust to 70 % of the minimum and maximum values. Measuring time shall be 5–6 seconds.
■ Fast forward and rewinding time: 100–120 seconds Using a C-60, set to fast forward and rewind, and measure the time with a stop watch.	■ Winding torque: 45–70 g·cm Using a cassette type torque meter (100 g·cm), measure the minimum value while in the play mode. Measuring time shall be 2.5–6 seconds.	■ F.F. torque: More than 50 g·cm Using a cassette type torque meter (130 g·cm), measure the value when the tape stops in the F.F. mode.
■ REW torque: More than 50 g·cm Using a cassette type torque meter (130 g·cm), measure the value when the tape stops in the REW mode.	■ Back tension torque: 1.5–5.5 g·cm After setting the REW mode without loading a cassette tape for 5 minutes, measure the back tension torque in the play mode, using a cassette type torque meter.	

www.manualscenter.com
CHIP PDF - www.xtestio.com